NAVY PERSONNEL RESEARCH AND DEVELOPMENT CENTER SAN DIEGO, CALIFORNIA 92152

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# A SYSTEMS ANALYSIS OF NAVY RECRUITING

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James K. Arima

Naval Postgraduate School
Monterey, California

Prepared for

Navy Personnel Research and Development Center
San Diego, California 92152

# FOREWORD

This research and development was performed in support of Advanced Development sub-project ZPN01.06, Advanced Navy Recruiting System.

The work was based on a proposal submitted by Professor James Arima, Naval Postgraduate School, Monterey, CA to the Navy Personnel Research and Development Center (NAVPERSRANDCEN), San Diego, CA. The specific task was to provide a systems analysis of the current Navy Recruiting System and recommendations for improvements. The work was monitored by Dr. Norman Abrahams of the Acquisition and Initial Service Program of NAVPERSRANDCEN. The assistance of the Navy Recruiting Command throughout all phases of this research is gratefully acknowledged.

Particular appreciation is expressed for the assistance of CDR John Neese and his predecessor, LCDR S. Sigmund, of the Navy Recruiting Command.

J. J. CLARKIN
Commanding Officer

# SUMMARY

## Problem

Several Navy research and development projects in the personnel and manpower area are concerned with Navy recruiting. A problem exists because there is no integrated and comprehensive description of the recruiting organization and its procedures to guide the researcher. Thus, there is the possibility that individual research projects would not benefit the Navy as much as they might if the researcher had a better knowledge of recruiting in the Navy.

## Research Objectives

The research objective was to provide this needed, integrated, comprehensive description by conducting a systems analysis of Navy recruiting. The objective of the systems analysis was to investigate and document Navy recruiting as a process that interacts with the larger military community of which it is a part and the civilian community which provides the raw materials it processes into accessions for the Navy.

## Approach

Accepting the fact that a systems analysis of an organization or activity could never be current, a time period was specified for analysis that included the last three quarters of FY 1974, which is the first year of the all-volunteer force. The emphasis in the analysis was placed on determining important trends, policies, constraints, operating principles, and recruiting philosophy, rather than a detailed documentation of practices. Toward this end, interviews were conducted and operations were observed at every echelon of the Navy Recruiting Command (NAVCRUITCOM), Armed Forces Entrance and Examining Stations, the Armed Forces Vocational Testing Group, and the Recruit Training Command (RTC), Orlando. Documents were collected and examined, and data reflecting current operations were obtained from NAVCRUITCOM headquarters for the entire FY 1974.

## Results

The efforts permitted, first, a static description of NAVCRUITCOM as it was hierarchically and geographically organized at that time. The functions and responsibilities of important staff elements were documented. It was then determined that individual citizens could join the Navy for the first time from 17 to 50 years of age and that progression through the educational system of the United States determined the programs for which a person was eligible. This progression was dynamically portrayed by flow charts. Then, a segment of this progression was flow-charted in detail, emphasizing the important decision points and hurdles from the time a person expresses an interest in a Navy enlistment until he takes the oath and ships to a RTC.

The NAVCRUITCOM was then examined as a system in its own right. It was found to be a system that generates leads by advertising, promotional activities, and canvasser prospecting; processes the leads as applicants for enlistment--a quality control process; and finally turns out its product--contracted manpower for the Navy. The primary inputs to the system to make this process possible are enlisted and officer recruiting personnel who have to be recruited and selected from the Navy at large and who have to be trained and maintained to operate at a high level of efficiency. The driving forces in the system are the programmed goals dictated to NAVCRUITCOM by the Bureau of Naval Personnel. The primary stresses on the system are generated by requirements to meet enlisted quality standards based on mental test scores, education, and race while simultaneously meeting monthly program goals. It could not, simultaneously, provide level shipping throughout the month to the three RTCs, nor distribute its output evenly to the three RTCs, as scheduled. The gross product of the system had to be converted to a net product because of failures in recruit training that were, justifiably or not, attributable to faulty selection by NAVCRUITCOM. Goal accomplishment for the fiscal year, which saw an abrupt increase in goals in the last quarter, was made possible by failing to meet the quality standards in effect. The prevailing norm in the system was a dedication to hard work as the primary means to meet its objectives.

## Recommendations

The following is a summary of the recommendations:

1. Development of a measure of productivity in recruiting (pg. 126).
2. Development of a method to measure area potential for enlistments (pg. 127).
3. Development of an index of recruiting effectiveness (pg. 127).
4. Evaluation of judgmental processes and subjective decision-making in recruiting (pg. 128).
5. Development and evaluation of recruiter selection procedures (pg. 129).
6. Evaluation of enlisted selection criteria and procedures (pg. 129).
7. Examination and development of recruiting incentives (pg. 131).
8. Development of recruiting information systems (pg. 132).
9. Miscellaneous suggestions for the provision of incentives to recruiters, job enrichment of the canvasser enviroment, the evaluation of advertising effectiveness, and conducting work-methods study of recruiting functions (pg. 132).

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# INTRODUCTION

## Problem and Purpose

The problems of Navy recruiting sharply increased on 1 July 1973 with the coming into reality of an all-volunteer force (AVF). Many studies prior to that time had attempted to differentiate the "true" volunteer from draft-motivated volunteers in order to obtain some insight into the nature and severity of recruiting problems that would result from the AVF. These studies tended to show that the quality of new acquisitions would be lower and that serious shortfalls could occur in the number of recruits (Allen, Simon, & Watson, 1973; Bennett, Haber, & Kinn, 1972; Drexler, 1973).

Against this gloomy outlook--and to forestall the disaster that some saw as inevitable--many active measures were initiated. Funds for recruiting were greatly increased, personnel authorizations for recruiters in the field were expanded, and a strong effort was made to improve the quality of leadership in the Navy Recruiting Command (NAVCRUITCOM). These primary moves led to a profusion of other programs, chief among which were large-scale advertising and marketing efforts and widespread support of analyses and studies to provide guidance for the recruiting effort. Because of the felt urgency of the situation, this proliferation of programs tended to be opportunistic and, often by necessity, based on faith. It was felt that the cost of opportunity loss--missing a good bet--would be much greater than the cost of programs that might not pay off.

However, such an approach eventually proves wasteful in several ways. First, there is a tendency for it to grow and demand ever-increasing resources, as foreseen by Congress in discussions of the FY 74 budget (U.S. House of Representatives, 1973). Second, resources that could be used to support good programs would be sacrificed to the indiscriminate support of many. Third, so-called "good" programs would probably be supported beyond their actual benefit to the total recruiting effort--a condition sometimes referred to as suboptimizing. Fourth, the sheer excess effort expended to assure the success of these programs has to run out eventually--with severe consequences. Accordingly, there was an obvious need for an integrated examination of the total recruiting picture to gain the proper perspective to guide the research effort on recruiting, and, eventually, the recruiting effort, itself. This study attempts to satisfy that need.

## Scope

An integrated examination of a total activity is typically called a systems analysis. There is the problem, however, of defining a systems analysis. It means many things to many people especially to those in the field of general systems theory (Buckley, 1968; Eckman, 1961; Emery, 1969; Rubin, 1971, 1973). In addition, systems analysis in applied settings has vastly different methods and models. Examples include those for systems engineering (Shinners, 1967), information systems (Fitzgerald and Fitzgerald, 1973), cost-effectiveness analysis (Quade, 1966), sociotechnical systems (DeGreene, 1973), and open systems in organizational analysis (Katz and Kahn, 1966). A common element among these widely varying system contexts, with reference to the analysis of an

existing system, is the need to know and understand how it functions. This requirement is usually met through such methods as observing the system in operation, conducting interviews and questionnaire studies with its personnel, and collecting and reviewing documentation within the system. The systems analysis of Navy recruiting in this study was performed using these methods. the purpose of the product is to show how the system functions. Although its intended audience is, specifically, the researcher who is interested in carrying out research on specific segments of the total system, it should also prove of value to those coming into NAVCRUITCOM and, to those already familiar with its operations.

The reader should also note that the analysis is of Navy recruiting in general, and not of NAVCRUITCOM, specifically. Previous analyses of NAVCRUITCOM have tended to focus on the recruiter and the means to improve his productivity or some other similarly specific target activity of the command. An integrated examination of Navy recruiting must consider the total environment in which it functions and the larger systems of which it is a part or a subsystem. The total environment includes the entire civilian sector, as well as the military environment. The next section will bring out these relationships.

A generally recognized fact is that any systems analysis of an existing system is obsolete by the time it is completed. Thus, a systems analyst must cease trying to be current, or he will never complete his analysis. Accordingly, although this analysis primarily represents Navy recruiting in the second and third quarters of FY 74, information pertaining to the remainder of FY 74 has found its way into the account. The sources of data were interviews with individuals in the Headquarters, NAVCRUITCOM and in field activities representing all echelons and programs of NAVCRUITCOM except the Navy Opportunity Information Center (NOIC), Pelham Manor, New York. The sample of field activities visited was biased toward the Far West, Southwest, and South. This situation arose because the author worked out of Monterey and San Diego, California, and the other specialized activities of NAVCRUITCOM--the Recruiting Officer Management Orientation (ROMO) school and the Navy National Recruiting Information Center (NNRIC)--are located in Pensacola, Florida, and Macon, Georgia, respectively. In addition, the Armed Forces Vocational Testing Group (AFVTG) is located at Randolph Air Force Base, Texas. The documentary base of the study will be cited where appropriate. In addition to the author's personal data-gathering efforts, several student programs were initiated on Navy recruiting. One that was completed at the time this report was prepared was a questionnaire study of recruiter attitudes in the San Francisco Navy Recruiting District (NRD) by Best and Wylie (1974).

To summarize, this report presents a systems analysis of Navy recruiting at an analytical/descriptive level based on interviews, documents, observation of field activities, and a questionnaire study. The target audience is the researcher in Navy recruiting and the person who needs a comprehensive (but not detailed) understanding of Navy recruiting. The time period covered is FY 74 with emphasis on the two middle quarters.

# THE OVERALL CONTEXT OF NAVY RECRUITING

## General

Navy recruiting feeds its product into the Navy as a whole and depends on the Navy for its own survival and continued functioning. Unlike most of the Navy, the recruiting function interacts directly with the civilian community and is completely dependent on it for the raw material to produce its output--new and renewed accessions to the Navy. These complex relationships and dependencies are shown in Figure 1, which is a block diagram of the primary and secondary flows of information, orders, persons, and materiel in Navy recruiting. The diagram is divided into two parts: the upper part represents the civilian community, and the lower part, the military environment.

The flow could start anywhere in the diagram, since it is continuous. If a linear picture of a segment (in time) of the overall context were to be drawn, it would begin with the year-end, on-board strength of one year and end with the year-end, on-board strength of the next year. Many factors affect the on-board strength at any one time, but they can be combined to result in two: gains and losses. The interaction of these two factors must be manipulated and regulated so that the transition from the on-board strength of one year to the next is accomplished in as straight a line as possible. Unfortunately, this is a dynamic situation characterized by lags in the sensing of the actual on-board strength and uncertainty in the recruiting function. As a result, both gains and losses will fluctuate cyclically around the straight-line function. Since gains, or recruiting, is the replenishing function, it will lag behind losses and react to it, resulting in greater dynamic swings around the straight-line input than desirable. These relationships are schematically presented in Figure 2, and are similar to those that have been modelled by Forrester (1961, 1968) for industry. In addition to the cyclical swings during the year, a special adjustment occurs at the end of the year, since an overage is not permitted. This means that recruiting could have a difficult time to even the account at the end of the year. For example, the quota for new accessions into the regular Navy for the month of June 1973 was 14,191, whereas it had averaged 4,369 for each of the preceding 3 months.

## Flow of Orders, Information, People, and Material

The foregoing account introduces the first segment (or the starting point) of Figure 1. The diagram now will be explained, using the numerical progression of line segments for the primary (shown by heavy lines) and secondary flows.

### Primary Flow

Line 1. The Chief of Naval Operations presents, through the Department of Defense and other agencies of the Executive branch, a request for manpower and funds. The request for manpower has a direct effect on the recruiting goals for the year. The request for funds includes specific items needed to maintain and operate the recruiting mission itself.

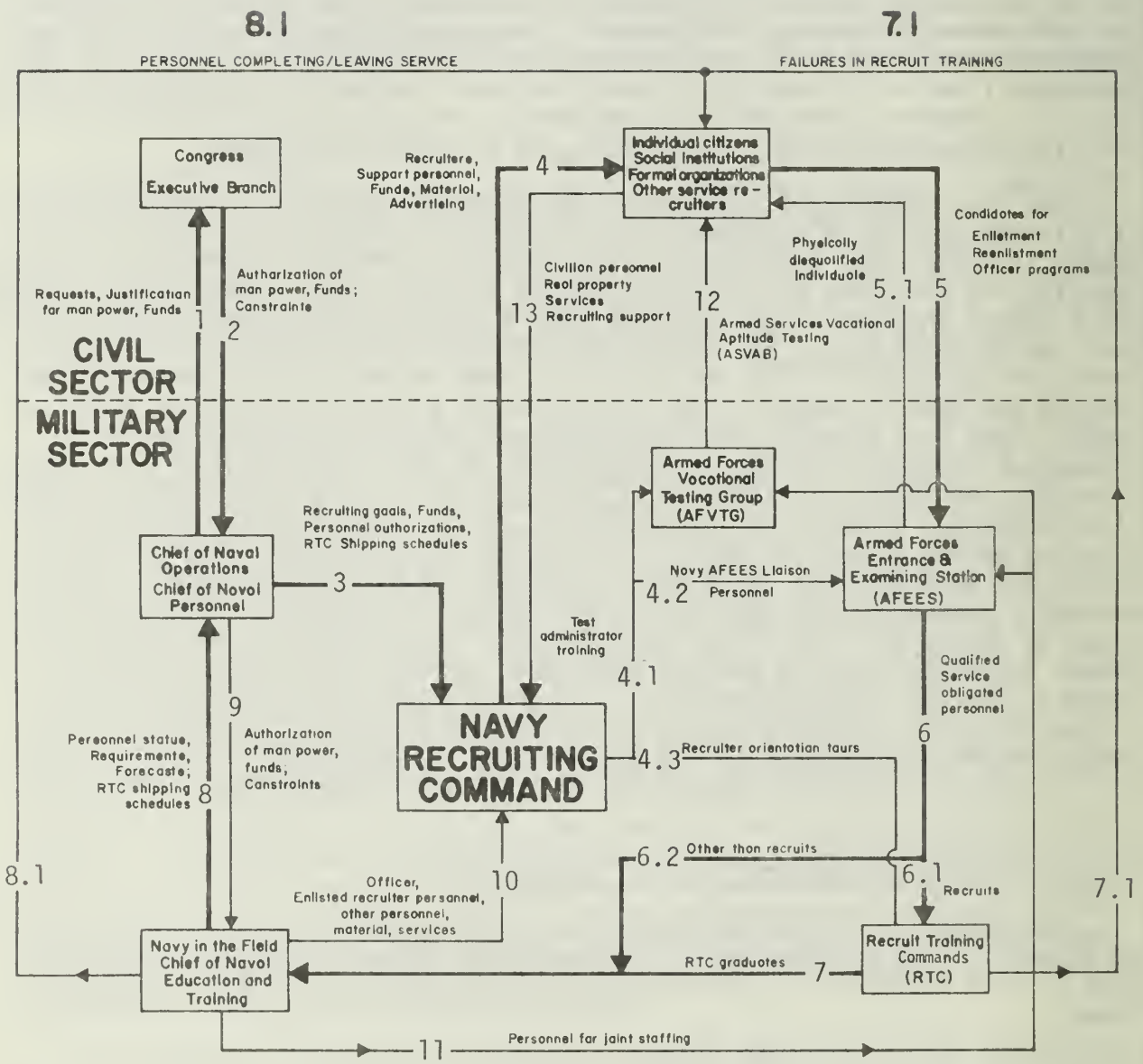


Figure 1. Block diagram of primary and secondary flows of personnel, funds, orders, information, services, and materials in Navy recruiting. The primary flow is shown by heavy lines.

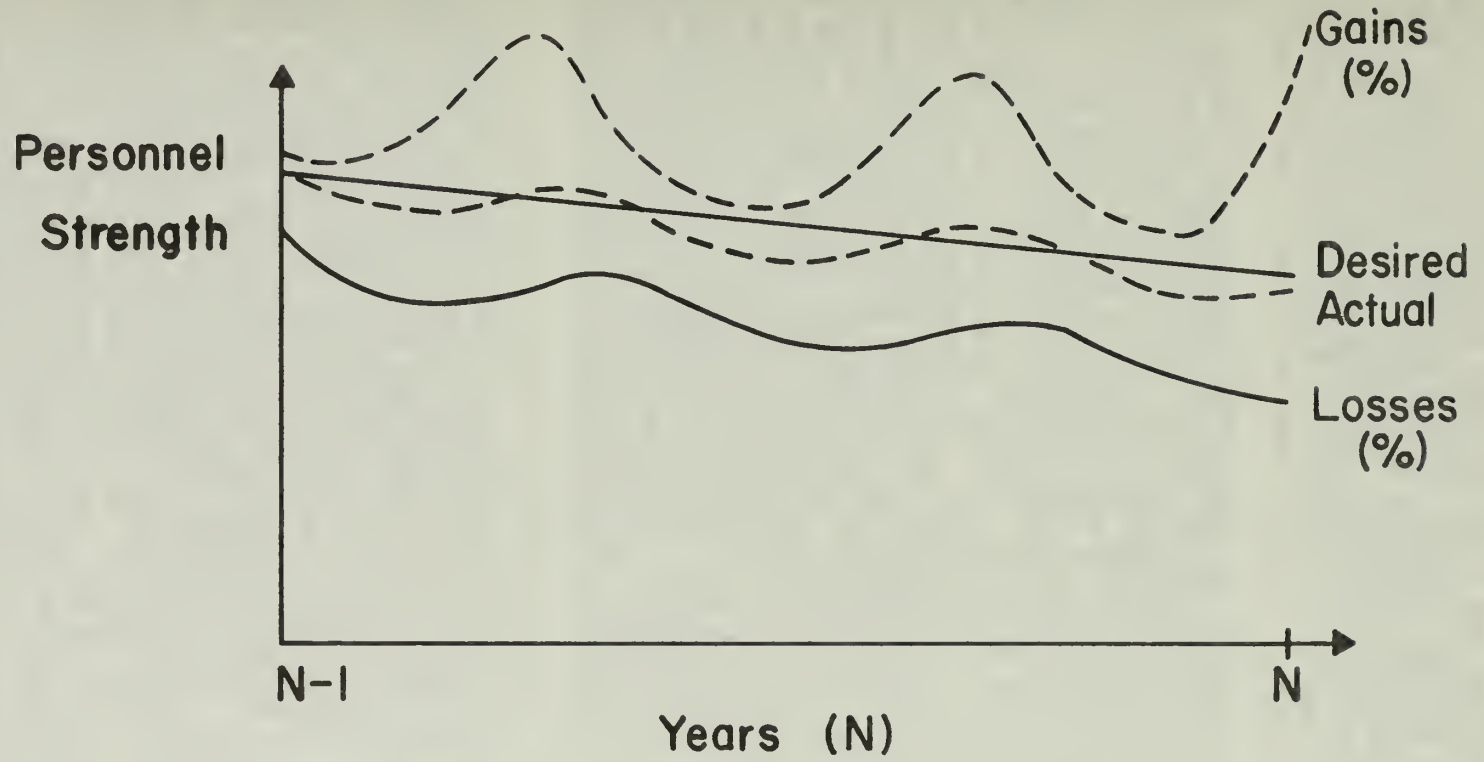


Figure 2. Schematic representation of the relationship between losses and recruiting (gains) needed to maintain a steady transition in on-board strength from one year-end to another. Gains and losses are represented as a deviation from the desired strength. Seasonal fluctuations are not represented.

Line 2. Congress, in the appropriations act, authorizes manpower and funds relating to the Navy as a whole and to the recruiting activity, in particular. Constraints and instructions are tied to these authorizations. For example, Public Law 93-238, the Defense Appropriations Act for FY 1974, required that only 45 percent of the forces could be non-high school graduates and only 18 percent, in the lower mental categories (Category IV). Since appropriations for advertising have forbidden the services from purchasing time for advertising from the electronic media, all recruiting advertising on television and radio must be in the category of public service (free) advertising.

Line 3. The Chief of Naval Personnel, as the manpower manager in the Navy and as the immediate higher headquarters for NAVCRUITCOM, provides recruiting goals, shipping schedules (to the Recruiting Training Command), and the necessary allocation of personnel, funds, and material to NAVCRUITCOM to carry out its mission. Extremely critical to the recruiting effort at this stage are the quality requirements for new accessions placed on NAVCRUITCOM and the criteria or methods with which these quality standards are to be enforced. It is obvious that the difficulty of the recruiting task can be, and is, adjusted by the quality standards that are imposed. For example, although paper-and-pencil selection tests have been effective in predicting the scores of trainees in service schools (since many were designed to do this), they have shown lower relationships, if any, to job/task performance in studies that used these criteria (O'Neill, Note). Similarly, physical standards take their toll of prospective recruits, and these could be excessively rigid (Chu & Norrblom, Note 2). Finally, the process by which quantitative and qualitative personnel requirements are established for new systems requires continuing examination, since it is presently a judgmental task that depends on the skill of the personnel analyzing the requirement. Accordingly, the established quality criteri are, to some extent, arbitrary. Nevertheless, the quantity and quality requirements for personnel determine the problems that will be encountered in the recruiting effort.

Line 4. NAVCRUITCOM, with headquarters in Arlington, Virginia, sends out personnel, materiel, and purchasing authorizations into the civilian community. Its field activities are arranged in geographic and hierarchical commands that will be described in the next section. Most of these activities are housed in leased facilities and their material requirements and services are, generally, procured locally. In some cases, even housing for personnel is leased by the Government. The direct interface with the civilian community is accomplished through enlisted and officer recruiters, whose function it is to route some persons into the Navy as they pursue their careers and life goals. The age of the population that can be recruited ranges from 17 to 50 years, including both men and women. NAVCRUITCOM recruiters compete for people not only with the demands of the civilian labor market, but also with recruiters for the Navy Reserve, the Naval Academy, and the other military services. To assist them in their task, NAVCRUITCOM performs the interaction shown by Lines 4.1 through 4.3

1. Recruiters are sent to the Armed Forces Vocational Testing Group (AFVTG) at Randolph AFB, Texas, to receive instruction and training in the administration of the Armed Services Vocational Aptitude Battery (ASVAB) (described in Line 12, below).

2. Recruiters are assigned as Navy liaison personnel to the Armed Forces Examining and Entrance Stations (AFEESs) which are operated by the U.S. Army

Recruiting Command (USAREC). These personnel receive and help prospective recruits as they process through the AFEESs, screen and check the corresponding paperwork, and facilitate relationships with the AFEESs.

3. Recruiters, especially those whose experience with recruit training occurred some time in the distant past, are sent to the Recruit Training Commands (RTCs) for an orientation and update on current recruit training. In this way,they can give recruits an accurate picture of what they can expect at the RTC, which is alleged to be a most important factor in helping them to quickly adjust to Navy life.

Line 5. Candidates for enlistment and, as necessary, for reenlistment and officer programs, are sent to the AFEESs by the recruiting field activities to receive physical examinations, to take the oath and to enlist, and to be shipped to RTC (in the case of new recruits). Since the AFEESs are the gatekeepers to entrance into the Navy, they can frustrate or facilitate the recruiting process in many ways. Thus, the NAVCRUITCOM AFEES liaison personnel and field activity personnel attempt to maintain good relations and smooth operations with their respective AFEES.

As the gatekeepers,the AFEESs return physically unqualified personnel to their originating recruiting stations and, eventually, their homes( Line 5.1). In many cases, these personnel may be only temporary rejects, in which case they are termed "temporary medical holds" by the recruiting community. Because of the constant turnover of AFEES personnel, it is difficult to maintain a constant standard of physical examinations. Many times, the standards which are enforced depend on the particular medical officer conducting the examination. Although conducting routine physical examinations day after day may not be every physician's choice of duty, his standards and actions have a profound effect on the recruiting function. One effect that is probably underemphasized is the influence the rejected person has upon his peers.

Line 6. Individuals who process through and leave the AFEES are now qualified and obligated for Navy service. New enlisted accessions go to the RTCs for recruit training (Line 6.1); others go to officer candidate schools or their initial assignments, depending on their status (Line 6.2). One problem that occurs in the recruit stream is the desirability of RTC San Diego or RTC Orlando, especially in the winter months, over RTC Great Lakes, which is north of Chicago. All enlisted female recruits go to the Orlando RTC, which may give it even greater attraction for male recruits. The uneven and cyclical flow of recruits to the various RTCs, after programmed shipping information is provided by the Chief of Naval Technical Training (through the Chief of Naval Education and Training), is a cause for constant readjustments in the training commands. Once at a particular RTC, the recruit in training generally has about the same attitudes and degree of satisfaction with his current situation regardless of the RTC's location.

Line 7. The RTC provides 9 weeks of basic training and then sends the recruit to advanced training for 3 weeks before his assignment to the fleet or to specialty schools. It should be noted that there are several problems related to the training cycle that are directly related to the recruiting function. For example, there is an increasing number of errors in the records of new recruits. These errors are eventually brought to the attention of NAVCRUITCOM for corrective action. Another problem, from the standpoint of the RTC clas-

sification element, is the improper classification of the recruit by NAVCRUITCOM. This can put the RTC in the very undesirable position of telling a recruit that he is ineligible for the program for which he had enlisted.

Line 7.1. Somewhere between 10 and 15 percent of the recruits in training are attrited and returned to their homes. With the advent of the AVF, it appears that this proportion will increase, due to personality factors rather than physical disability or miscellaneous causes, such as death. The RTC tendency is to accuse the recruiting activity of poor selection screening; the recruiting community, on the other hand, can accuse the training centers of "demotivating" the individual. Both sides agree, however, that a 10 percent attrition is a lower boundary that would be difficult to improve. Here, again, the returnee should have some effect on his peers in the civilian community, especially if he attempts to rationalize his failure by blaming the Navy.

Line 8. The feedback loop from the Navy in the field, which includes its personnel status, requirements, and forecasts of manpower trends, closes the recruiting cycle. This feedback is then used to start the cycle all over again. Included in this cycle, for convenience, is the origination of shipping schedules to the RTC. Based on a comparison of the yearly cumulative projection and the actual flow through the RTC, the Chief of Naval Technical Training at Memphis, Tennessee, programs the desired input to the RTC, which is then processed through the Chief of Naval Education and Training to the Chief of Naval Personnel.

Line 8.1. Another portion of this final segment is the flow of personnel who complete their military service and return to the civilian community. Some will be retirees, but a larger number are individuals who reenter the pool of those still qualified for military service. This may be in a broken or unbroken continuation of their previous service or in a completely different category for which they may be qualified.

Secondary Flow

Line 9. The overall authorization of manpower and funds and the constraints on their utilization that goes to the Navy in the field may influence the Recruiting Command either directly or indirectly. For example, such factors as cutbacks in personnel ceilings would make it difficult to staff high-priority activities, which in turn, may affect the availability of quality personnel to man the authorized billets in NAVCRUITCOM. NAVCRUITCOM units are still military units in every sense and are affected by factors that affect the entire Navy.

Line 10. The personnel who will function as enlisted and officer recruiters as well as those who will man the support and maintenance functions, come from the Navy in the field. Thus, there is an internal recruiting function in the Navy to garner well-qualified individuals for key assignments in the Recruiting Command. Promotion to flag rank from a NAVCRUITCOM position, for example, enhances the desirability of service in recruiting. Generally, officer and enlisted recruiters are volunteers who are initially screened by the Navy in the field as to their qualifications for such assignments. The Recruiting Command also reviews the qualifications of volunteers before it accepts them. Obviously, the criteria and methods for determining who is best qualified deserve

much attention, since the quality and effectiveness of the recruiting effort must be mediated by the possession and application of appropriate abilities by recruiting personnel.

As stated in the Line 9 discussion, the activities of the Recruiting Command are dependent on Naval activities at Departmental headquarters and field commands for normal operational and maintenance support, such as pay of personnel.

Line 11. The Navy in the field provides personnel, through joint staffing agreements, to two activities that are closely involved with recruiting--the AFEESs and the AFVTG. These agreements do not apply to NAVCRUITCOM personnel who are assigned as AFEES liaison personnel, or those who are engaged in the Armed Services Vocational Aptitude Battery (ASVAB) testing program.

Line 12. The ASVAB testing program is administered by the AFVTG at Randolph AFB, Texas, and is operated locally by recruiting personnel of the four services. The formal program title is the Department of Defense High School Testing Program. For FY 1974, the program called for the testing of 1,100,000 students in some 18,000 schools (AFVTG, 1974). Allocation of responsibility for testing to the four services is based on the proportion of all new accessions each service accounts for during a selected base period. In FY 74, the Navy was assigned responsibility for 22 percent of the total program, and the Marine Corps, 13 percent. The actual operation of the testing program in any particular part of the country is coordinated through an Interservice Recruiting Committee made up of commanders from the recruiting activities of the four services in the area. The committee may assign specific schools to each service, or it may pool the testers in the area and assign individuals to specific schools, regardless of service. The Navy, in addition, has embarked on an Educator Liaison Program in which qualified in-house educators provide professional supervision and support of the testing program.

It is obvious that participation in the program must be voluntary for any specific high school, and that testing of a large number of students in many schools represents a considerable investment on the part of the services. However, it is considered a worthwhile program since it offers a means of (1) sharing the extensive experience and leadership position the services have on aptitude testing and occupational classification, and (2) stimulating student interest in service job and training opportunities. Its overall purpose should be to supplement rather than compete with the school's overall vocational counseling program. Thus, its success largely depends on the success that the services have in integrating service career opportunities into the school's career education program (Brown & Callahan, 1973). The Navy Educator Liaison Program and such publications as "Navy Training-Civilian Careers: To Be Someone Special" should be very helpful in this area (U.S. Navy Recruiting Command, 1973).

Printouts of the ASVAB test results are provided to the services after they have been provided to the school. (The lag gives the school counselor the first chance to communicate and work with the results of testing.) These results provide four important pieces of information to the services: (1) a list of names and addresses of military eligibles, (2) an indication of the plans and intent of each examinee after he leaves high school, (3) information that could help determine whether the individual is qualified mentally for military service, and (4) a set of aptitude scores that indicate whether the examinee is

qualified for special programs. At present, it is safe to state that no other instrument provides the quality leads for recruiters that the ASVAB does.

Line 13. The civilian community not only provides the raw material that recruiters attempt to process into the Navy, but also provides such necessities as (1) civilian personnel to augment service personnel, (2) real estate to house all of the activities and personnel of the command, and (3) utilities and services, including car rental and parking and the billeting of candidates who undergo physical examinations and psychological testing away from their homes. Also, there are civilian organizations and institutions of special significance to Navy recruiting, such as the Recruiting District Assistance Councils (RDAC), which are sponsored by NAVCRUITCOM and made up of influential persons in the geographical area of a Navy Recruiting District including representatives from such groups as the Navy League and the Fleet Reserve Association. These councils advise and assist the recruiting effort. For example, in the New Orleans area, many persons who desire to enlist in the Navy, are unable to meet the mental standards. To overcome this problem, the New Orleans RDAC has vigorously encouraged a reexamination of the standards for the individual who is motivated for Navy service and possesses a good capability for learning, but who cannot meet current mental standards. In addition, it has conducted remedial programs to help individuals meet the required standards.

## ORGANIZATION OF THE NAVY RECRUITING COMMAND

### Hierarchical Organization

The overall organization of NAVCRUITCOM is consistent with organizational doctrine and requirements for all Navy organizations in general. This organization along traditional Navy lines is designed to facilitate administration to fulfill Navy requirements including such functions as (1) handling pay, promotion, assignment/reassignment, and evaluation of its personnel; (2) performing accounting and control of personnel, property, and money; and (3) carrying out area missions and responsibilities assigned to its elements by appropriate area commanders. Traditional Navy rank and precedence are used to subordinate responsibilities and authority, which directly affects relationships and responsibilities in the recruiting function. The hierarchical structuring of NAVCRUITCOM is shown in Figure 3. It is what is known as an echelon three command. That is, the Chief of Naval Operations (echelon one) delegates command authority for the Navy Recruiting Command to the Chief of Naval Personnel (echelon two), who is the immediate superior of the Commander, Navy Recruiting Command (COMNAVCRUITCOM). The command headquarters is directly assigned to the Chief of Naval Operations for command and support and to the Commandant, Naval District, Washington, D.C., for area coordination. NAVCRUITCOM is a shore, field activity that is responsible for all aspects of recruiting in the Navy (with the exception of the Naval Academy) within the United States, its possessions, and certain overseas activities. Its mission is: [1]

> To recruit men and women for enlisted, officer candidate, and officer status in the Regular and Reserve components of the Navy. Prepare for the Secretary of the Navy the documents required for original appointment to warrant and commissioned grades.

Subordinate organizations of NAVCRUITCOM are the eight Navy Recruiting Areas (NRAs) and the 42 Navy Recruiting Districts (NRDs). The NRAs are commanded by a captain, and the NRDs, commanders or captains. The NRAs exercise administrative and operational control of the NRDs that are assigned to them, and they report to the local Naval District commandant for area coordination. The mission of the Commander, NRA, is:

> Manages the recruitment of men and women for enlisted and officer programs in the Regular and Reserve components of the Navy within his assigned area.

The NRD, the basic operational unit of NAVCRUITCOM, is an echelon five command with all the resources necessary to pursue the recruiting mission of the Navy. The commanding officer exercises supervisory control over the recruiting stations in his district, reports to the NRA commander for operational and administrative control, and to the commandant of the local Naval District (or his representative) for area coordination. He has the following mission:

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[1] Mission statements are from the Standing Operating Procedures Manual for NAVCRUITCOM Field Activities, COMNAVCRUITCOMINST 5400.2, 26 July 1973.

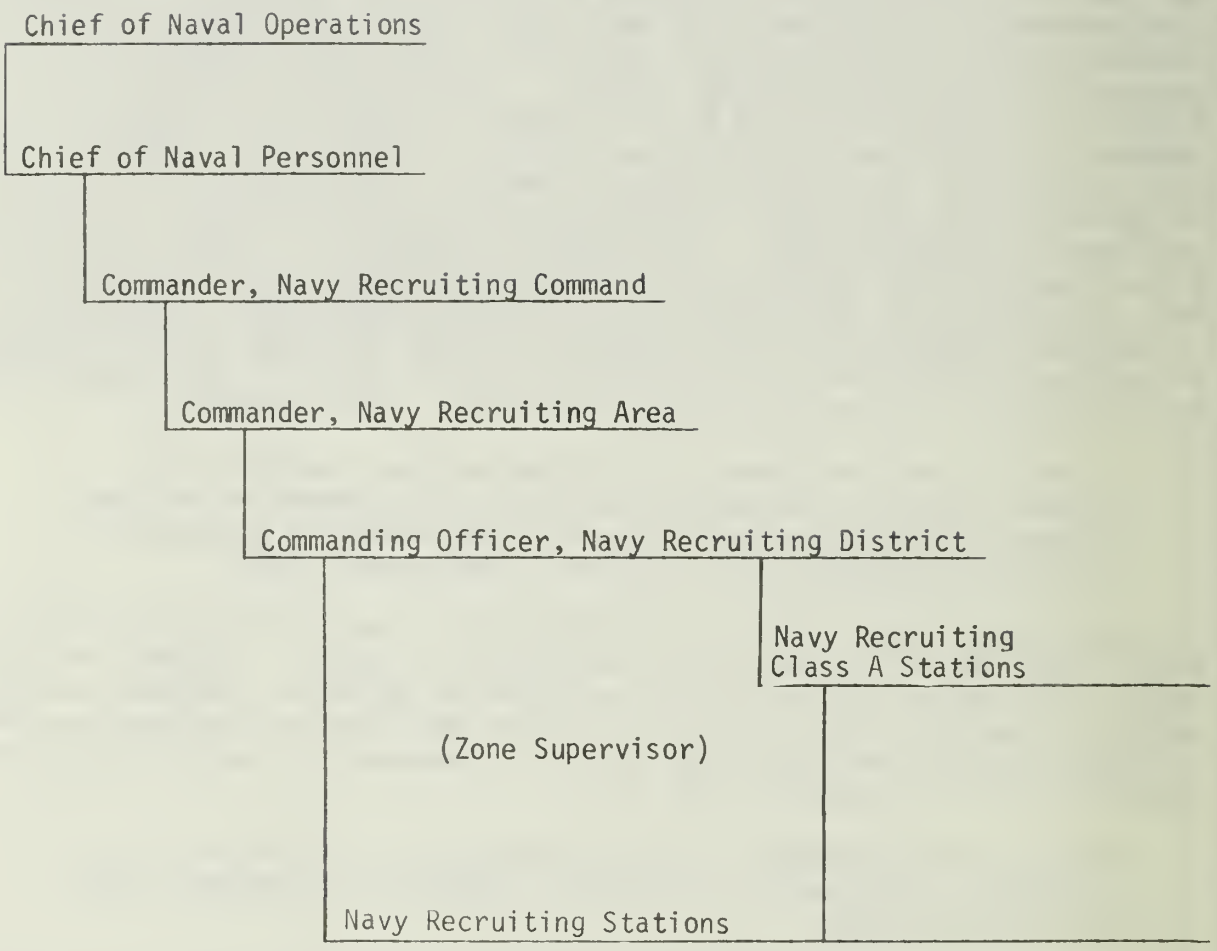



Figure 3. Hierarchical relationships in Navy recruiting.

Manages recruiting activities within his assigned Navy Recruiting District in the recruitment of men and women who meet mental, moral physical and other specific standards for enlistment or reenlistment; obtains the best qualified men and women applicants from civilian sources for enlistment as officer candidates and for direct appointment as officers in the Regular Navy and Naval Reserve.

There are several categories of recruiting stations, all with the common purpose of carrying out the recruiting mission in their assigned area. A Class A Naval Recruiting Station (NRS) is usually located at a city which includes an AFEES but not an NRD headquarters. It could also be established to take advantage of other factors, such as saving of applicant travel costs or providing unusual area potential for enlistments. A Class A NRS is commanded by an officer and has support personnel to accomplish administrative and processing functions. There were 23 Class A stations in the contiguous United States and one each in the Philippines, Hawaii, and Alaska during the period of this report. The NAVCRUITCOM procedure manual also provides for Class B stations, which differ from the A stations in that they are not commanded by an officer. The ordinary NRS is under the direction of a recruiter-in-charge (RINC) and has enlisted recruiters permanently assigned to it. The NRS RINC reports to the appropriate NRD either through a zone supervisor (if there is one) or through a neighboring Class A station.

This completes the normal chain of command of NAVCRUITCOM, except for three field activities that are under the direct control of headquarters, NAVCRUITCOM. These are the Recruiting Officer Management Orientation (ROMO) Detachment at the Naval Air Station, Pensacola, Florida; the Navy National Recruiting Information Center (NNRIC) collocated with the NRA 3 Headquarters, Macon, Georgia; and the Navy Opportunity Information Center (NOIC), Pelham Manor, New York. The ROMO Detachment, commanded by a Navy captain, administratively handles the selection of officer and enlisted recruiters, operates a selection testing program, has curricular responsibilities for officer and enlisted training, and operates the training course for officers newly assigned to NAVCRUITCOM. The NNRIC, commanded by a Chief-in-Charge, exists to man and receive telephone calls on the 800 areawide lines that are cited in national recruiting advertising. The NOIC, operated by contract with civilian firms, receives written inquiries and cutouts from national advertising and operates, through contractual arrangements, a computer file of all leads generated by such advertising.

## Geographic Organization

Figure 4 shows the boundaries of the eight NRAs and the 42 NRDs. Generally, a state falls completely within a particular NRA. There are notable exceptions, however. For example, Pennsylvania is in three different NRAs (1, 2, and 4), and a small piece of northern Indiana falls within NRA 5, while the remainder of Indiana is in NRA 4. Thus, demographic trends, population centers, transportation facilities, the socioeconomic orientation of an area, the distribution and location of schools, and a number of other considerations go into establishing and changing boundaries.

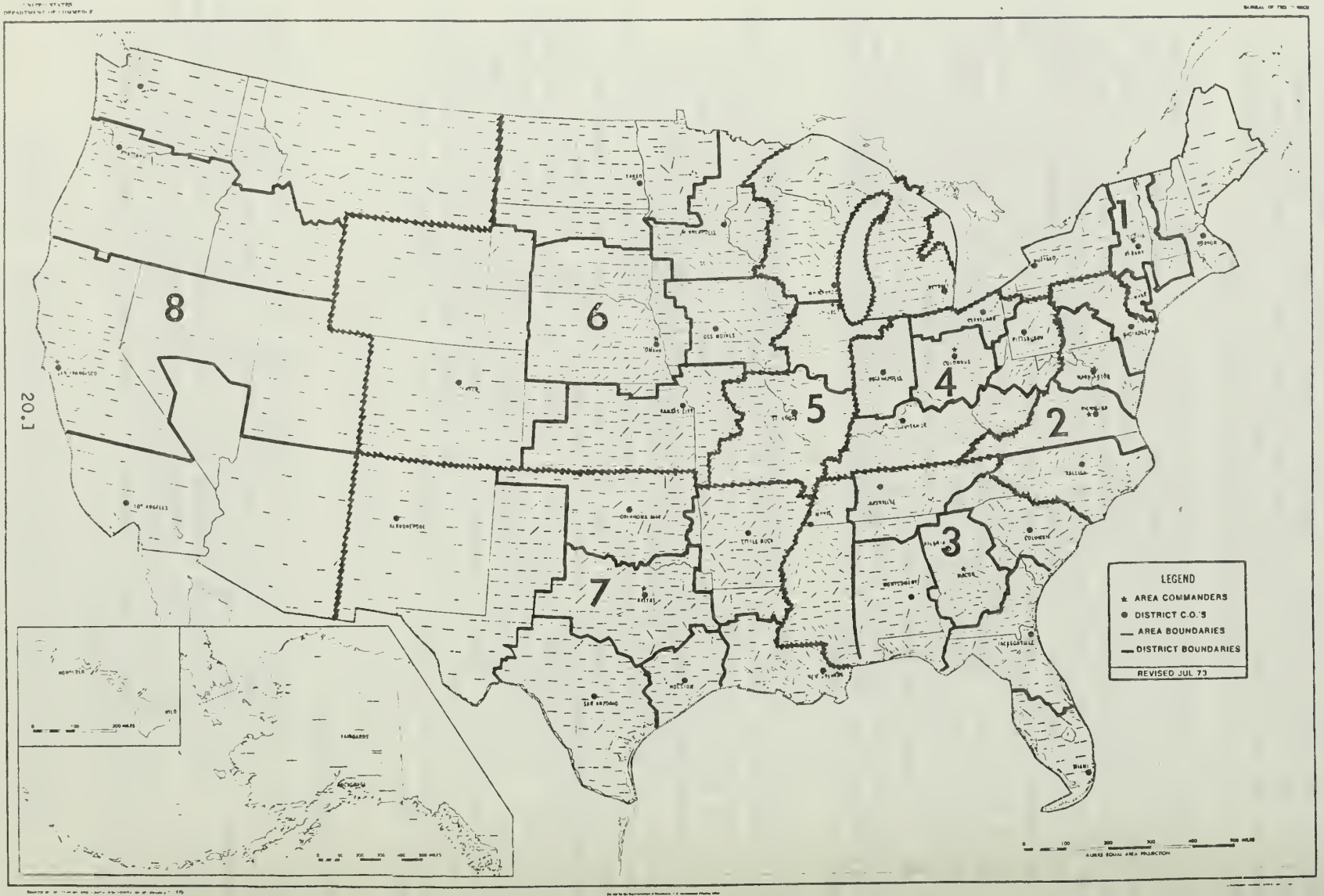



Figure 4. Navy Recruiting Areas and Districts.

A particularly important dimension in establishing area boundaries is the total population in the area since resources and recruiting goals for new accessions are allocated to the NRA by the population of qualified military availables (QMA). The population distribution of QMA by NRA is shown in Table 1, which indicates that the population has been divided up rather evenly among the NRA. Generally, the use of population data to allocate and assign personnel and support is carried down to the level of individual recruiters.

Table 1

Proportion of the Population of Qualified Military Availables in Each Navy Recruiting Area

| Recruiting Area | Percent of Population |
|---|---|
| 1 | 13.9 |
| 2 | 10.2 |
| 3 | 10.0 |
| 4 | 12.7 |
| 5 | 13.3 |
| 6 | 10.2 |
| 7 | 11.0 |
| 8 | 18.7 |

Note: Based on quota allocation scheme for first enlistments in effect in March 1974.

The responsibility for recruiting activities in Alaska is assigned to the Seattle NRD in NRA 8; in Hawaii, Guam, and the Philippines, to the San Francisco NRD, also in NRA 8; in Europe, to the Boston NRD in NRA 1; and in the Virgin Islands and Puerto Rico,to the Miami NRD in NRA 3. The QMA population in these areas is included in the figures given in Table 1 and accounts for the excessively large percentage in NRA 8.

At the Navy Recruiting District level, the area is usually divided up into zones, each with a zone supervisor. Although most of the NRDs have several zones, there have been recent moves to eliminate some of them to cut down on NRD middle-management personnel. Figure 5 presents the four zones in the Houston NRD as of March 1974. The Houston NRD is in NRA 7 which, as shown in Table 1, has 11 percent of the QMA population. Based on its QMA population, the Houston NRD quota within NRA 7 is 15 percent. Thus, its share of the total NAVCRUITCOM new accessions is 1.65 percent (15% of 11%), which is slightly less than the 2.38 percent expected for the "average" NRD (based on 42 NRDs). The Houston NRD has only one large population center (Houston), with other concentrations in the Galveston-Texas City area and in the Beaumont-Port Arthur area. It has no class A stations. Moreover, it is compact enough to permit zone supervisors to meet at NRD headquarters in Houston and to return home in 1 day. Of the 4 zones, Zone 1 is least compact and stretches 200 miles at its widest point. The city of Houston itself falls in Zones 3 and 4, with East

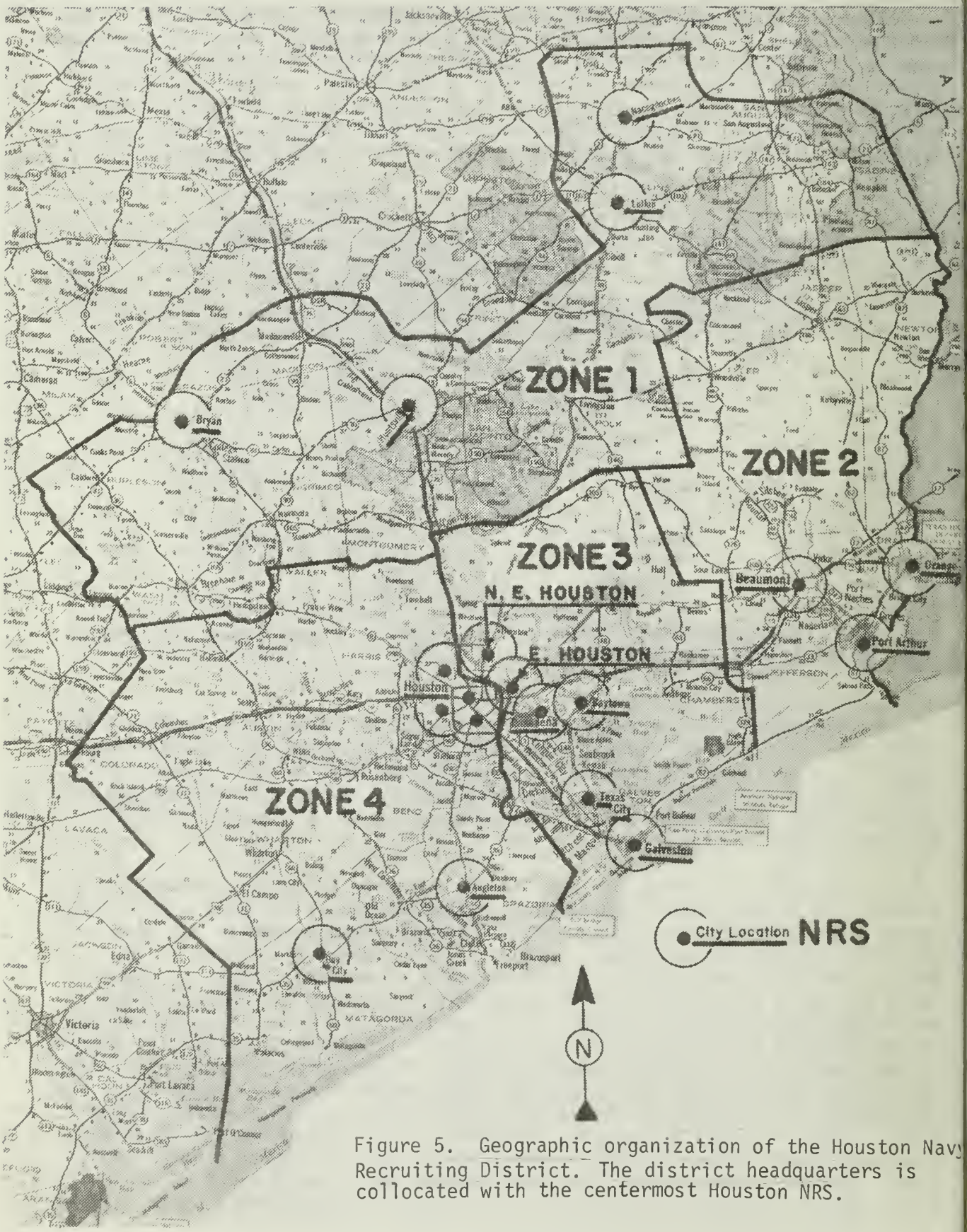



Figure 5. Geographic organization of the Houston Navy Recruiting District. The district headquarters is collocated with the centermost Houston NRS.

Houston and Northeast Houston in Zone 3 and the remainder of Houston in Zone 4. The expected value of new accessions for each zone would be .41 percent (25% of 1.65%) of NAVCRUITCOM goals.

Organizing recruiting activities based on the QMA population results in extreme geographical inequities. For example, the total area in the three western NRAs (6, 7, and 8) is much larger than in the other five areas combined. Such inequities bring up a number of questions, including the following: Should some sort of a density factor be used to weight quota allocations, since it is much more inefficient to work over a wide area with thin population? Should Navy recruiters attempt to recruit individuals who are representative of the general population, or should they be cost conscious and recruit in high density areas where their efforts produce the greatest payoffs? To answer this question, it is necessary to determine (1) the ratio of net recruiting inputs, to a QMA density factor, and (2) whether we get better Navy personnel--say, per 1,000 population of QMA--from population-dense areas (e.g., the inner city) or from suburban or rural areas where the population becomes less dense. A hidden cost factor may also be involved here in that, in population dense areas, it is convenient for an individual to visit a recruiting station. As a result, recruiters may spend much time on individuals in population dense areas who are not qualified or who do not join up, whereas, in very sparsely populated areas, only serious and genuine prospects meet with a recruiter. Thus, the question of allocating recruiting resources and defining area boundaries and quotas is not simple. The two extremes, among the services, are the U.S. Air Force that doesn't actively recruit in some areas of the country and the U.S. Marine Corps that attempts to recruit individuals who are representative of the population.

## Departmentalization and Assignment of Functions

### Headquarters, Navy Recruiting Command

Description of the functional organization of NAVCRUITCOM logically begins with its headquarters since NAVCRUITCOM, organized along traditional military lines, is a top-down organization. That is, given its overall mission, all the functions and processes necessary to carry out the mission are identified, grouped, and assigned at the highest level. Once the organizational model is established at this level, subordinate levels of the organization reflect the model to the extent necessary to carry out their portion of the overall mission. This is the way of classical, administrative management theory (March and Simon, 1958). For Navy recruiting, the traditional staff and line model can accommodate most of the functions. Where it cannot, ad hoc staff divisions or special assistants are created.

An explanation of word usage is required before proceeding with the organizational description. The term, responsibility, has a rather specific meaning in military command in the sense of fixing the ultimate responsibility for any outcome. This usually turns out to be the commander of any element. For example, if we were to talk about the responsibility for a function in the headquarters, NAVCRUITCOM, it will turn out that the commander is responsible for everything. Responsibility as used here, however, will refer to where the action is centered, the person or activity that is the *de facto* head. When an individual is said to be responsible for a function, it will mean that, among his peers, he is the most concerned with it.

The organization of the NAVCRUITCOM headquarters is shown in Figure 6. The commander primarily concerns himself with the progress of the recruiting operations and all the factors directly affecting it. He works through his eight NRA commanders to achieve the recruiting goals. The deputy commander acts as the chief staff officer and is responsible for the command's budget, national advertising campaign, and the selection of personnel for assignment to NAVCRUITCOM. He personally reviews all officer records for selection and is responsible for their formal evaluation.

Among the special assistants in the executive group is the Special Assistant for Sales Management. He occupies a key role as the principal adviser to the commander and expediter in the area of "sales performance," and is responsible for training the "sales force." ("Sales," in the Recruiting Command refers to the sale of an enlistment package to an individual.) There is also a special assistant for the coordination of Reserve recruiting who monitors the "One Navy" recruiting effort. The One Navy program is the formal centralization of all recruiting--Reserve and Regular--into one effort under COMNAVCRUITCOM. The Recruiting Officer Management Orientation (ROMO) Detachment has been previously mentioned.

The Administration and Logistics Department performs those functions for the entire command. The Plans and Policy Department is responsible for planning, research, and control. The planning and setting of policy, which include policies for the procurement of officer and enlisted personnel, is carried out through the Plans Division. The research function, which is primarily an initiating and monitoring activity, is carried out through the Research Division. And the Data Management Division maintains current and historical data and performs analyses that provide the command the detailed feedback necessary to control its operations and adapt to changing circumstances. The Recruiting Data System is a service function for the headquarters in the area of automated data processing.

The Operations Department performs the main production function of the headquarters. It is concerned with the implementation, management, and success of the programs and policies for enlisted and officer procurement. The Officer Programs Division is responsible for officer procurement and the Enlisted Programs Division, for enlisted procurement. The responsibilities of the Officer Programs Division include determining the acceptability of specific individuals for officer programs and recommending or granting of waivers within the policies established by the Chief of Naval Personnel. The Enlisted Programs Division has similar responsibilities in regards to applications for enlistment. The Enlisted Programs Division also has two, very important, operating elements (1) the Recruit Allocation Control System (RACS) Branch and (2) the CRUITMAN Branch.

The RACS is a semiautomated system for controlling spaces for occupational specialties (OCCSPEC) and school openings (commonly called "seats"). The basic item in the system is an IBM card for each school seat and OCCSPEC opening. These are placed in three circular racks. Around each rack are several operator positions, each equipped with telephone, writing space, and buttons for controlling the rack. Any operator can rotate the rack to the area where the cards he is interested in are filed. One of the three racks is special-

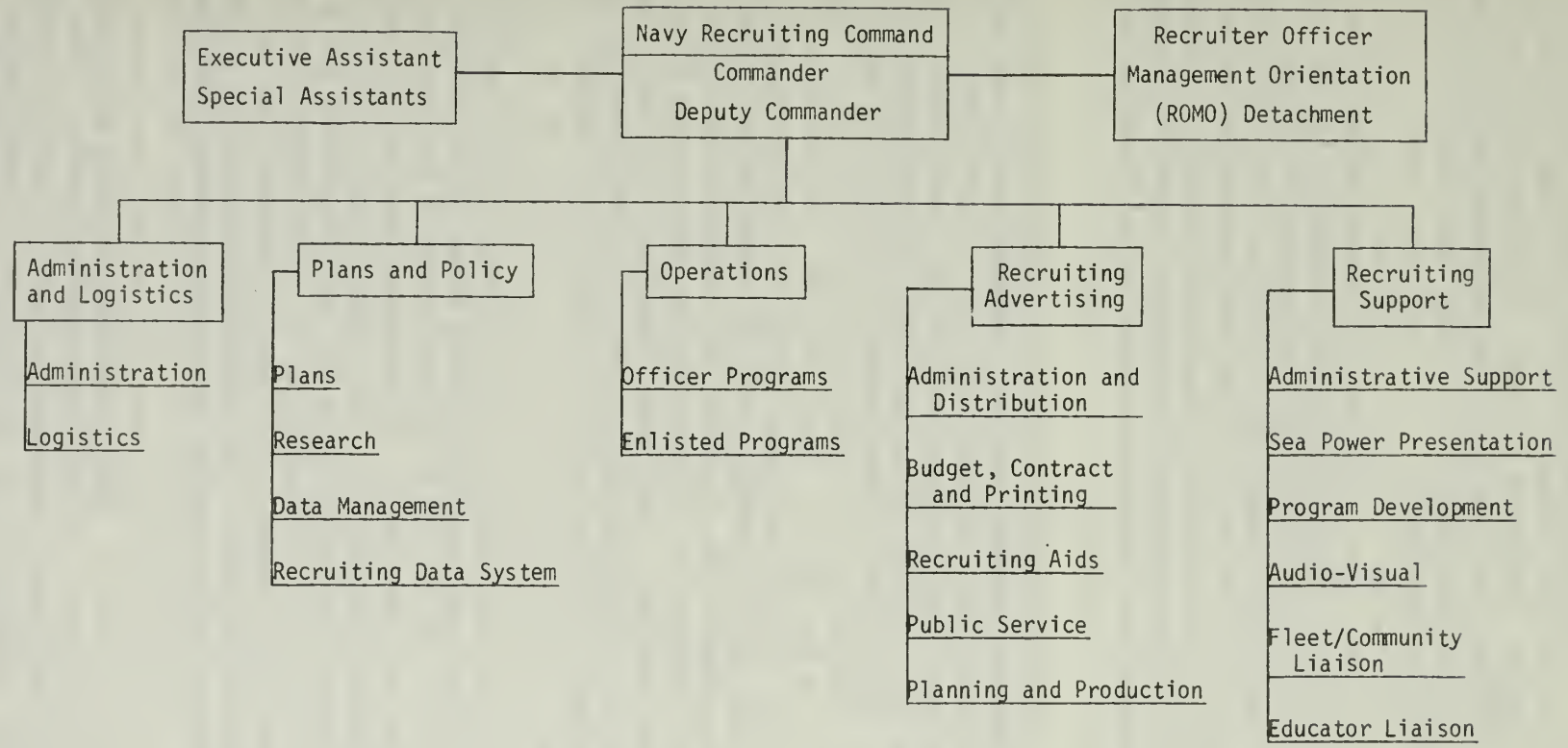



Figure 6. Organization of the Headquarters, Navy Recruiting Command

ized: it includes all WAVE openings and all programs for advanced electronics and the nuclear fields. Operators respond to telephone calls from recruiters or classifiers in the Recruiting Command field activities and reserve school seats, if available, for a candidate recruit. Data regarding an individual are key punched onto the card at the RACS and forwarded to the Bureau of Naval Personnel (BUPERS). A weekly report of available openings forecasted well into the future is mailed to the field.

The CRUITMAN Branch prepares and maintains the manuals for enlisted recruiting (CRUITMAN-Enlisted, COMNAVCRUITCOM Instruction 1130.8) and officer procurement (CRUITMAN-Officer, COMNAVCRUITCOM Instruction 1110.1). These are detailed manuals that carry the descriptions and qualification standards of each program in Navy recruiting and detailed administrative instructions for processing applicants in each program. Important changes are promulgated immediately by COMNAVCRUITCOM memorandum instructions, and later incorporated as changes to these manuals. These manuals are the ultimate authority for all personnel engaged in recruiting.

The Recruiting Advertising Department is an operating as well as a staff element of NAVCRUITCOM headquarters that is responsible for all recruiting aids and national advertising. National advertising consists of advertising that is done on a national level directly from this department. It is also characterized by the fact that it is accomplished by contract with civilian agencies. The term, "RAD" items (from Recruiting Aids Division), refers to hard items that are produced by the department and distributed through Navy publications channels to the field. These include printed materials, display items, and canned radio, television, and motion-picture items that are used by recruiters at their own level. Another area of advertising is public service advertising--the free advertising that the Navy must obtain to tell its story through the electronic media. Finally, there is the program of selling the Navy, which is broader and has a different emphasis from other advertising activities. This part of the advertising effort (it would not be called advertising by most members of the command) is carried out through the Recruiting Support Department.

Not shown in Figure 6 is the Assistant for Advertising Coordination, who reports directly to the Recruiting Advertising Department director (through the assistant director). He is the principal point of contact and the expediter, coordinator, and monitor of all projects assigned to advertising agencies--i.e., national advertising. The Administration and Distribution Division provides internal administration for the department and distributes RAD items to the field. The Budget, Contract, and Printing Division handles those functions for the department. The Recruiting Aids Division creates RAD items and has a staff of 11 writers, information specialists, media production specialists, and editors who are mostly in middle, General Schedule grades of the Civil Service. A Navy photographer is also a member of the division. The Public Service Division conceives and develops projects and promotions that are effected as a public service through private business organizations, celebrities, civic organizations, and the communication media. Finally, the Planning and Production Division is, essentially, the recorder or bookkeeper for the department's many activities. It maintains a current display of all advertising programs and informs the field about them. It keeps track of contracts and procurements to ensure their completion within the budgetary time frame. It also is the coordinating agency for the Recruiting Aids Management (RAMS)

Board, composed of selected enlisted supervisors of local advertising at the NRDs. The board's function is to give advice on the effectiveness of the RAD projects and to suggest new and improved projects.

The Recruiting Support Department is primarily engaged in promoting the Navy under the assumption that doing so successfully will result in a better recruiting effort. While the Recruiting Advertising Department promotes general and specific career opportunities in the Navy, the Recruiting Support Department attempts to create local, regional, and national climates favorable to the Navy. Its efforts, therefore, must overlap considerably and coincide with the public relations/public information activities of the Navy and the Department of Defense. Accordingly, the Recruiting Command's own public affairs officer is located within the Recruiting Support Department. The department carries out its programs through community activities and agencies and through the Naval Reserve. In addition to general support activities, the department is also responsible for the educator liaison program that has the previously mentioned objective of integrating Navy careers into the occupational career programs of educational institutions.

Typical promotional projects and activities are the Sea Power presentations, appearances of the Navy Band and the Blue Angels precision flying team, sponsorship of science fairs, the Sea Cadet and Explorer programs, guest cruises for influential persons in the community, and the high-school speaking program. Among the educational liaison promotional activities are Navy exhibits at national and regional conventions of educational and professional organizations.

Within the department, the Administrative Support Division provides administrative support internally to the department. The Sea Power Presentation Division prepares materials and conducts the necessary background research for the Sea Power Team presentations. It provides overall coordination and administration of the Sea Power Team. The Program Development Division develops promotional and publicity projects using Navy performing units, the mass communication media, and the vehicle of special events that can be oriented to the support of recruiting activities. The Audio/Visual Division prepares audiovisual materials, including printed brochures, that are designed to be used in all of the programs of the department. The Fleet/Community Liaison Division plans and coordinates the use of active and reserve elements of the fleet in support of Navy recruiting and maintains liaison with Navy-related organizations and major youth organizations. It coordinates the Recruiting District Assistance Council program, previously mentioned. The Educator Liaison Division is responsible for the promotion of activities through educators at all levels of government, professional organizations, and all levels of the academic community that will bring the opportunities in the Navy to the attention of American youth. The division director also represents COMNAVCRUITCOM in matters dealing with CNET and the AFVTG.

## Headquarters, Navy Recruiting Area (NRA)

As mentioned earlier, the Navy Recruiting Area (NRA) is the echelon in the hierarchical organization of NAVCRUITCOM that is between the headquarters of the command and the operating elements in the field. As such, its primary functions are to command, control, and manage the operations of the Navy Recruiting Dis-

tricts (NRDs) in its areas. This does not require a large number of personnel or facilities but it does require good communications. The organization, shown in Figure 7, is very functional and is patterned to track the programs that constitute the Navy recruiting effort. In addition to the internal personnel of the NRA organization, each NRA has a representative of Grey advertising He is an account executive within the Grey organization and is a senior representative with considerable discretion.

The primary effort of the NRA organization is aimed at taking the recruiting goals assigned it, portioning the goals to the NRDs within its area, and then monitoring the progress towards those goals so that they are met for the area as a whole. The differential allocation of resources to the NRD is another tool for accomplishing its goals. These activities will be described and analyzed in detail later. It should be evident, however, that the Enlisted Goal Coordination Branch is a crucial activity within the headquarters.

In addition to the elements engaged in managing recruiting programs, the Education Coordinator provides staff supervision of the education specialist activities within the area and institutes programs of his own that are at a level that covers more than one NRD. The NATOPS/ASO officer is responsible for the staff supervision of air activities within the NRA. (Each NRD has qualified pilots and a T-34 aircraft for the Air Officer Candidate procurement program.) The Recruiting Information Department maintains liaison with the Grey representative and evaluates and initiates advertising programs at the NRA level. The Administration and the Supply and Fiscal departments are engag in both the internal administrative and logistic matters pertaining to the NRA as a military organization and also with respect to similar functions for all of the NRD within the area.

There are two operational activities at the level of the NRA headquarters The first of these is in officer recruiting. Quotas for officer programs are based on the number of students in institutions of higher education, rather than on the general count of qualified military availables. Accordingly, ther may not be sufficient personnel available in some NRDs to cover the institutions in their areas. As a result, much of the officer procurement activities are actively conducted by the officer procurement personnel at the area headquarters in coordination with their counterparts at the subordinate NRD levels.

Another operation conducted at the NRA level is the ENRO (Enlisted Navy Recruiter Orientation) course. This is a 2-week orientation course for new enlisted recruiters assigned to the NRA, and is repeated bimonthly. Each NRA has special leased facilities for conducting classes for some 20 recruiters at any one time. (Since 2-week initial programs were observed, the course has been extended to 3 weeks with the third week being an orientation at the NRD or working level.) In addition, there is a 1-week refresher course (not operational at the time the study was made) for experienced recruiters aimed at sharpening their skills and sharing lessons learned.

The organization shown in Figure 7 is schematic. It is a recommended organization, but local area commanders are free to make modifications to meet their specific needs. Inspection of the organization charts of three NRA reveals, however, that they closely adhere to the recommended structure. One factor that may influence the reluctance to deviate widely from the recommende

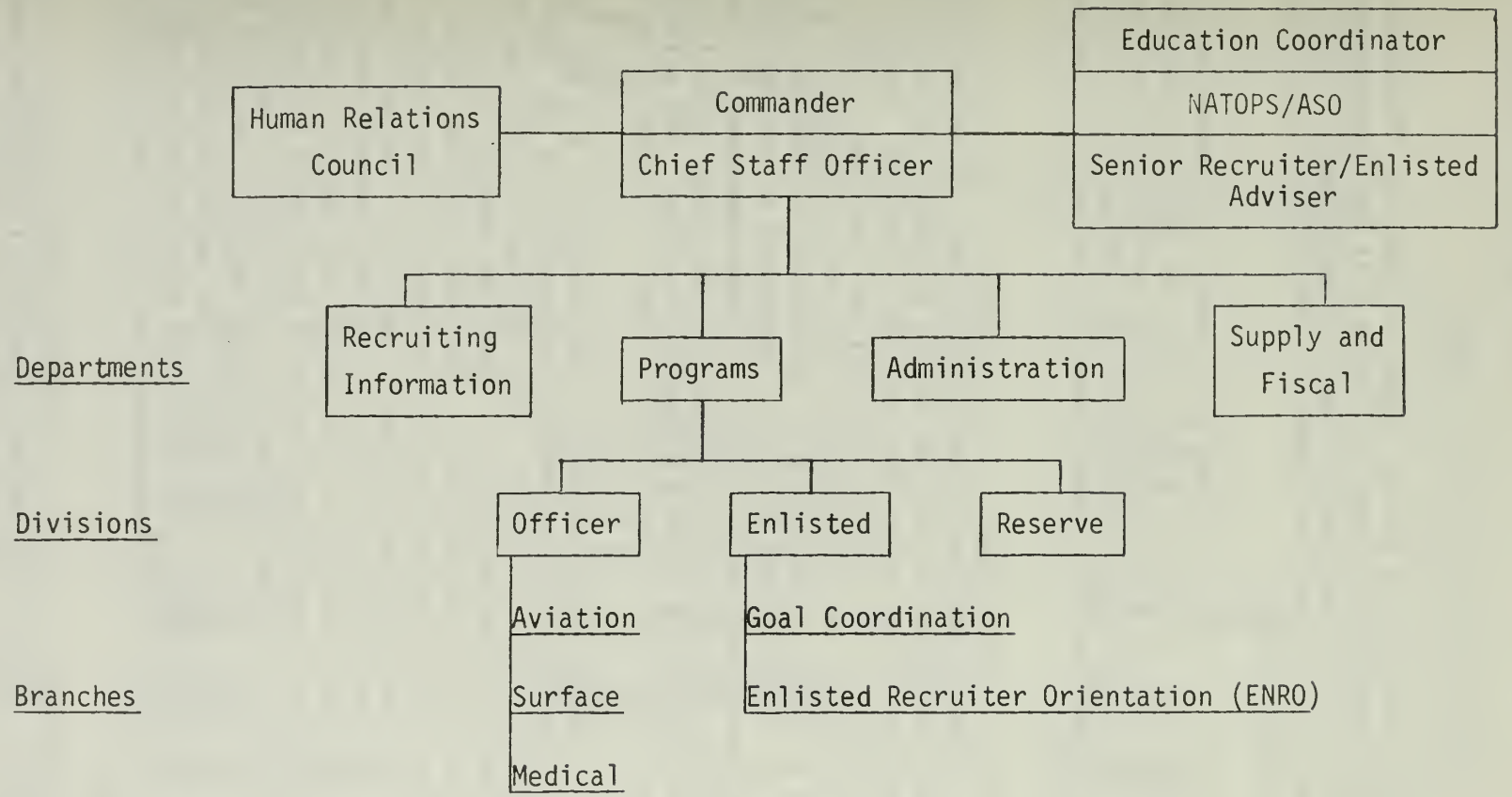



Figure 7. Basic Organization of a Headquarters, Navy Recruiting Area.

structure is the need to maintain specific titles for the officer positions, along with a billet sequence code number, for manpower accounting purposes.

## Headquarters, Navy Recruiting District (NRD)

The basic organization of a NRD is shown in Figure 8. The NRD is a Navy field unit, and the organization shown in Figure 8 is the headquarters for exercising command of the unit and controlling its operations. It is the unit that represents the actual operating element of NAVCRUITCOM where individuals are recruited for Navy service.

The command block in Figure 8 shows that there is a commanding officer and an executive officer. As at the other levels of NAVCRUITCOM, the commanding officer routinely places his attention on the progress of the recruiting mission assigned to his unit, while the executive officer serves as the chief staff officer and emphasizes the internal administration of the organization i his sphere of activities.

The Officer Programs Department is responsible for the recruiting of officer candidates and applicants for direct commission. In coordination with the officer programs personnel at the NRA level, personnel of the department schedule visits to schools and other institutions within the district to inter view interested persons and to promote Navy officer programs. Other than scho hospitals are prime-target institutions for the officer recruiting effort. Most of the actual processing of bona-fide candidates, either for officer candidate schools or for direct commissions, is conducted at the NRD headquarters In addition to self-generated leads, there are leads that come in from national advertising efforts and ordinary "walk ins." The latter seem to be especially prevalent in areas where college students vacation. The aviation programs officers also double as pilots of the aircraft assigned to the NRD.

The Enlisted Programs Officer and the Chief Recruiter are the two individuals at the NRD headquarters most directly responsible for the day-to-day recruiting effort for enlisted accessions. They program and oversee the effort of recruiters in the field and maintain as timely an account as possible of the recruiting situation in the district. The chief recruiter works through his zone supervisors, who exercise direct supervision of recruiters in their respective zones. In some very large NRDs, a regional organization with regional supervisors may be established between the NRD headquarters and the zon supervisors. An essential function of the recruiting support activity is the interviewing, testing, and counseling of recruit candidates by the personnelme assigned to the division. As the testing and classification decisions become removed from the recruiter in the field and moved forward (in time) from the classifier at the training center, the work of the personnelmen at NRD headquarters takes on a significantly more important role in the recruit-processin chain of events. The AFEES liaison personnel are also a part of the enlisted programs department.

The Support Department is concerned with the administration and logistic functions of the NRD. Considering the wide variety of activities and the larg geographic spread of the unit, the administrative and logistic activities are a major effort within the NRD. The department is involved in both the interna administration and support of the unit and in the recruiting operations. In the latter category of activities, the Recruiting Information/Aids Division

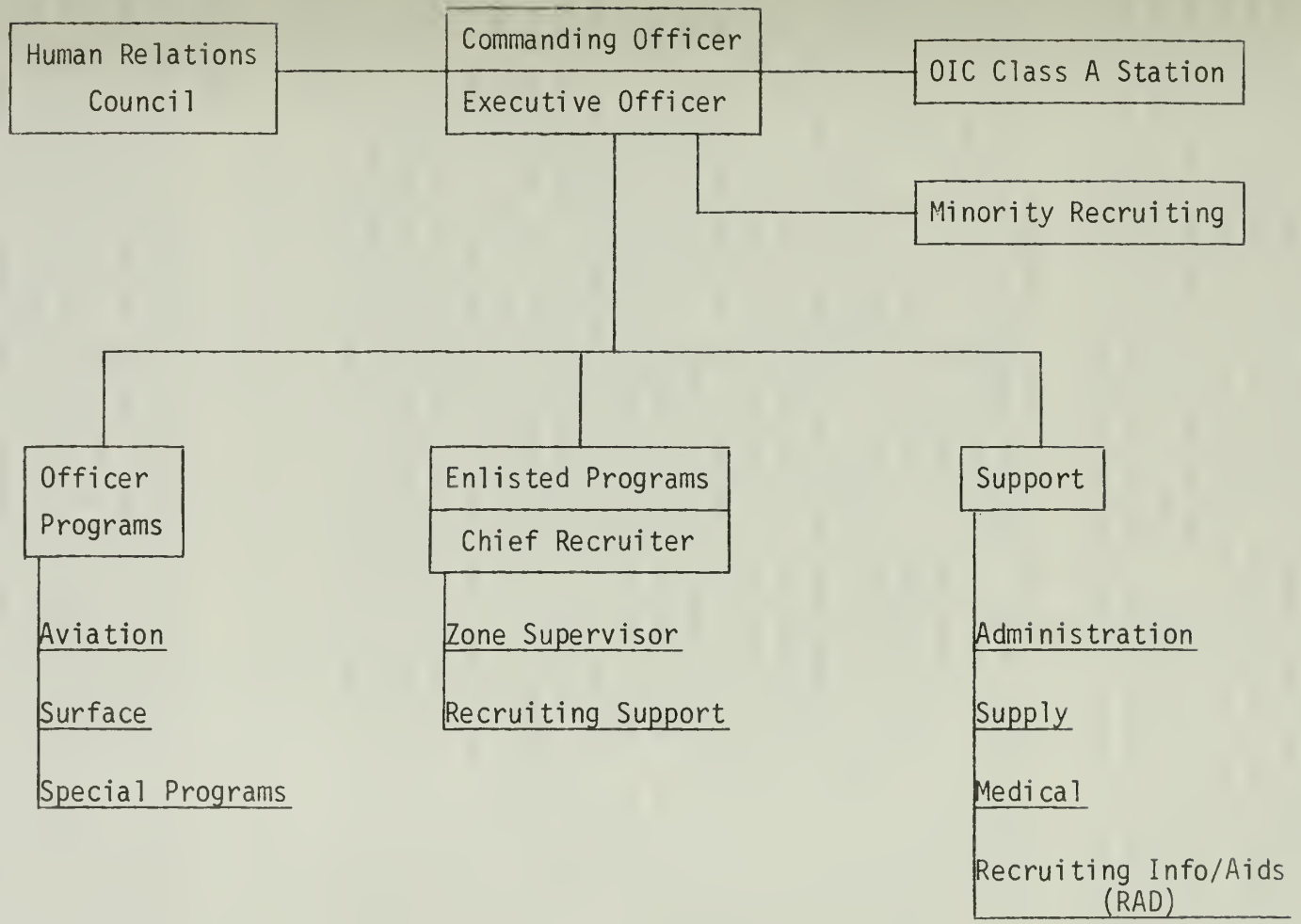



Figure 8. Basic organization of a Headquarters, Navy Recruiting District.

plays an important part. This division procures, stocks, and issues the recruiting aids used in the district and plans and operates promotional and advertising efforts in the district.

## FLOWPATHS OF QUALIFIED MILITARY AVAILABLES (QMAs) WHO ARE PRIMARILY INTERESTED IN OFFICER PROGRAMS

### Overview

This section focuses on qualified military availables (QMAs), the individuals who constitute the pool of potential candidates for Navy service. These individuals have reached 17 years of age, are physically and mentally fit to serve, and are not otherwise disqualified for military service. It is obvious that they are hypothetical individuals, since it is not possible to determine--without evaluation of the various individuals--whether they are indeed qualified. Actually, QMAs exist only in an actuarial sense, based on demographic data and past recruiting and selective service experience.

The following paragraphs trace all of the paths that a potential QMA can take from the time he first becomes eligible for military service until he passes the maximum age for initial entry into a regular or reserve component of the Navy. This is a span of 33 years--from age 17 up to (but not including) the 50th birthday. It is not possible to understand Navy recruiting as a system without a full appreciation of these alternative paths. While the ostensible purpose of Navy recruiting is to help track the authorized on-board and year-end strengths of the Navy by providing new manpower to make up for losses, this can be done only by diverting some of the QMAs into the Navy before they reach age 50. It is especially worthwhile to examine Navy recruiting in this longitudinal fashion because the tendency of Navy recruiters is, understandably, to be shortsighted and concerned with immediate goals for distinct programs. Thus, they take an ahistorical, cross-sectional, and partitioned approach to the QMA population. That is, at any one time, recruiting personnel are aware of, and concerned with, the number of potential prospects that exist at that particular time for a particular program. One recruiter may be looking for enlistees for the advanced electronics program; another, for air officer candidates; and a third, for dentists. These recruiters do not realize that, except for the passage of time, they could be looking for the same individual. Thus, a subgoal of Navy recruiting could be to keep individuals aware of and interested in Navy programs during the entire 33-year span they are eligible for military service. In this way, there is always a reasonable potential for diverting the person into the Navy one or more times as he pursues his life goals.

### Detailed Flows

Recruiting is inextricably tied into the educational progression that is characteristic of the United States. The five stages in the life sequence of an individual are (1) before he enters a 4-year college or university (whether or not he finally enters that college or university), (2) when he is enrolled in a 4-year college or university, (3) when he graduates with a baccalaureate degree, (4) when he is enrolled in graduate level or professional level school, and (5) when he graduates from a graduate program or professional school with an advanced degree. Each of these five stages is a milestone that determines the range of programs for which an individual is qualified and that, accordingly, results in a different emphasis in the recruiting effort.

Flowpaths of Individuals Prior to Entering a 4-Year College or University (Whether or Not They Finally Enter That College or University)

The flows of individuals at stage 1 are shown in Figure 9. The U.S. Army Recruiting Command at Fort Sheridan, Illinois, as the executive agent for the Department of Defense, determines the number of new QMAs entering the system (Block 1) based on the most recent census and the most recent experience of the services with respect to the number of those examined who qualify for military service. This number is used for planning purposes by all the services. The accurate determination of the number of QMAs will no doubt become more difficult in the all-volunteer forces (AVF), since a large and representative portion of the appropriate age-groups was examined when the Selective Service system was in effect. Applicants for enlistment, however, will constitute a much more restricted sample of the qualified age groups.

The new cohort of 17-year-olds may be enrolled in high school (Block 2) or they may be high-school dropouts (Block 3). This is an important distinction from the standpoint of recruiting, since all of the services have found that a non-high school graduate does not adapt as well to service life and presents a much higher risk of becoming a disciplinary problem. Thus, high-school dropouts are more likely to be unqualified for military service (Block 10) or separated for cause (Block 17) than those who finish high school.

Those in Block 2 may be enrolled in high schools either with or without Junior ROTC. However, studies by Callahan, Brown, and Davis (1973) suggest that the proportion of students interested in Navy enlistments from schools with JROTC is no greater than that from schools without JROTC. Individuals in both Blocks 2 and 3 can be further classified according to their interests, such as their degree of awareness of the Navy as an occupational choice; participation in the Boy Scouts, Sea Scouts, Explorer, and similar organizations and other areas that might influence the paths they take in their life sequence.

While the path from Block 2 to 5 to 8 commences with the individual enrolle in high school, it should be noted that the Navy policy is to encourage the individual to complete high school before he embarks on a Navy enlistment. Thus, although many individuals are induced to enlist while they are in high school, they do not commence service until after graduation. The flow of non-high school graduates who are interested in Navy enlisted programs (Block 5) to Blocks 8, 9, and 10 is discussed in detail in the next section.

The flow following graduation from high school (Block 7) is shown in some detail since there are specific enlistment programs for individuals who complete a vocational school or an appropriate course in a 2-year college. These programs enable the applicant to enlist at an advanced grade and enter job fields that require special skills. An individual who chooses to enter the world of work, become a housewife, or join another service rather than go to a college or school (Blocks 14 and 20) will continue to be eligible for a Navy enlistment; that is, as indicated in Figure 1, he may reenter the flow at Block 5. With suitable qualification, he may be a prime candidate for enlistment as a direct procurement petty officer (DPPO). This cross-level transfer of civilian skills directly into the skilled jobs of the Navy has been favorably examined by Kernodle (1973).

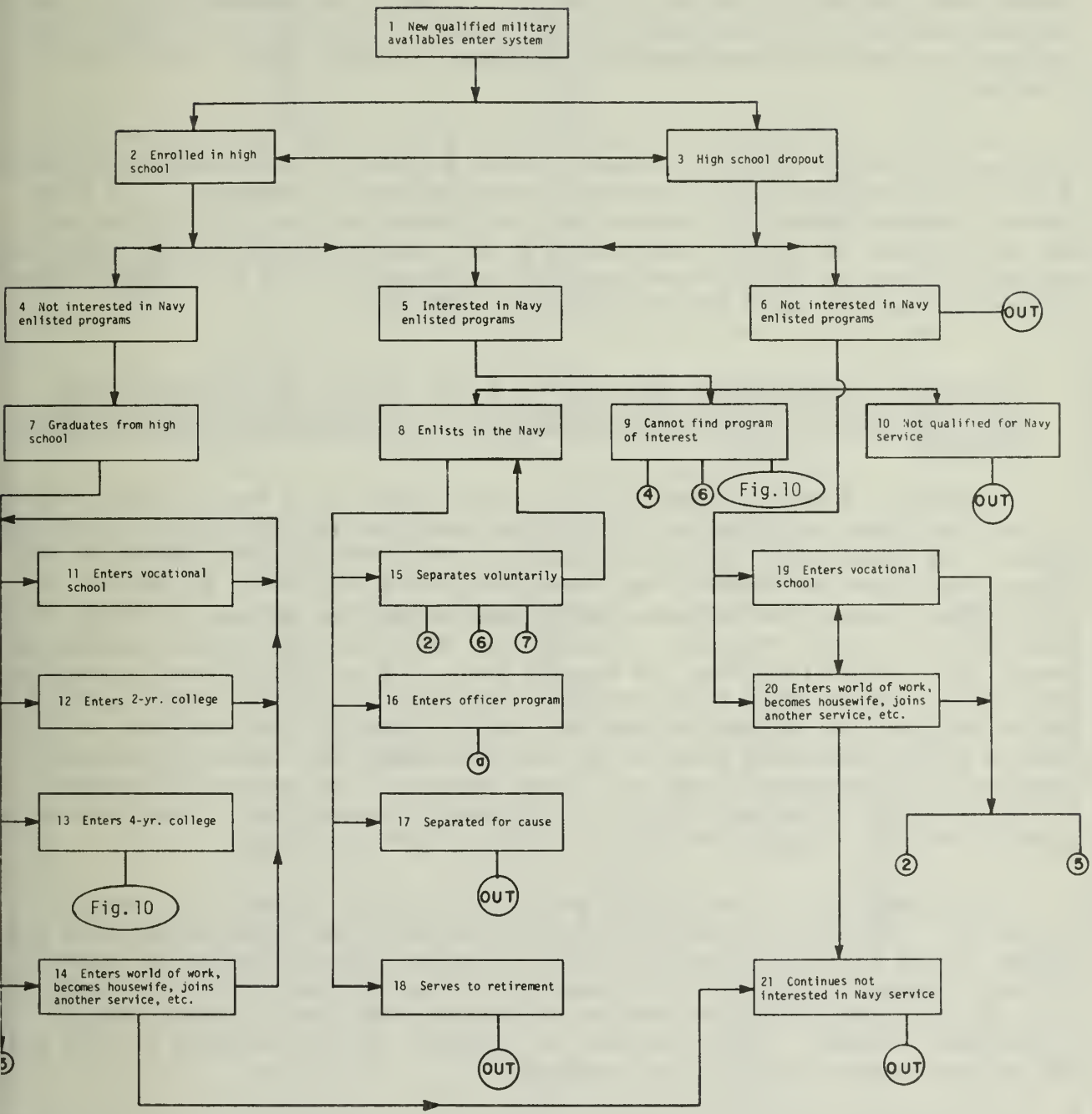



Figure 9. Flowpaths of individuals prior to entering a 4-yr. college or university and of those who do not enter a 4-yr. college or university. Circled entries redirect the flow to the point indicated.

After an individual has completed an enlistment and returns to civilian life (Block 15), he can reenter the QMA flow in a number of ways. He can reenlist in the Navy (Block 8) and continue his naval service without a break. He may even reenter high school (Block 2). If he is or becomes a high school graduate (Block 7), he may enter any of Blocks 11, 12, and 13, in which case he remains a desirable candidate for enlistment or for one of the officer programs.

Obviously, the majority of persons who do not go on to higher education continue to have no interest in Navy service (Block 21) and become ineligible for first entry into Navy service upon reaching age 31. However, if a high school graduate becomes a licensed Merchant Marine officer at Block 14, he may be eligible for direct appointment as an inactive, special duty, restricted line officer in the grade of ensign through captain. In this case, he may enter Navy service up to and including his 49th year.

### Flowpaths of Individuals Who Enter a 4-Year College or University and Who Drop Out or Those Who Are Interested in a Navy Undergraduate Student Program

Entering a 4-year college or university leading to a baccalaureate degree is the first step to becoming eligible for more than 60 different officer programs. The educational institution must be an accredited institution or one whose credits are accepted by not fewer than three regionally accredited institutions. Three institutions require special mention because of their direct relationship to Navy programs: (1) the U.S. Naval Academy, which provides an annual input of ensigns into the Regular Navy, (2) the Coast Guard Academy at New London, Connecticut, which provides officers for the U.S. Coast Guard who may be assigned to the Navy in wartime, and (3) the U.S. Merchant Marine Academy at Kings Point, New York, which provides cadets who are eligible for appointment as midshipmen in the U.S. Naval Reserve. The Recruiting Command is not involved in the recruiting for the Naval Academy, and it does not actively recruit from the Coast Guard or U.S. Merchant Marine Academy.

The flowpaths of individuals who enter a 4-year college are shown in Figure 10. The first elements of the flow separate the students who drop out (Block 2) and those who continue their education without showing an interest in Navy programs (Block 3). As shown by the flow following Block 2, those who drop out fall into a pattern that is essentially the same as those with a high-school diploma. Those who show no interest in Navy programs at this point may become interested after they graduate.

Let us turn now to the student enrolled in a 4-year institution of higher learning who is interested in a Navy officer procurement program. He may be interested in an officer candidate program (Block 6) or a Navy student program (Block 7). In either case, he may prove to be ineligible for Navy commissioned service (Block 15). Ineligibility may be due to: (1) an unfavorable National Agency Check (NAC), (2) an unfavorable complete background investigation (required for some programs), (3) the inability to pass a selection test (when required), or (4) failure to meet the required physical standards. Programs that require a background investigation may also require that the individual's spouse pass a NAC. Although the flow following Block 15 shows the individual

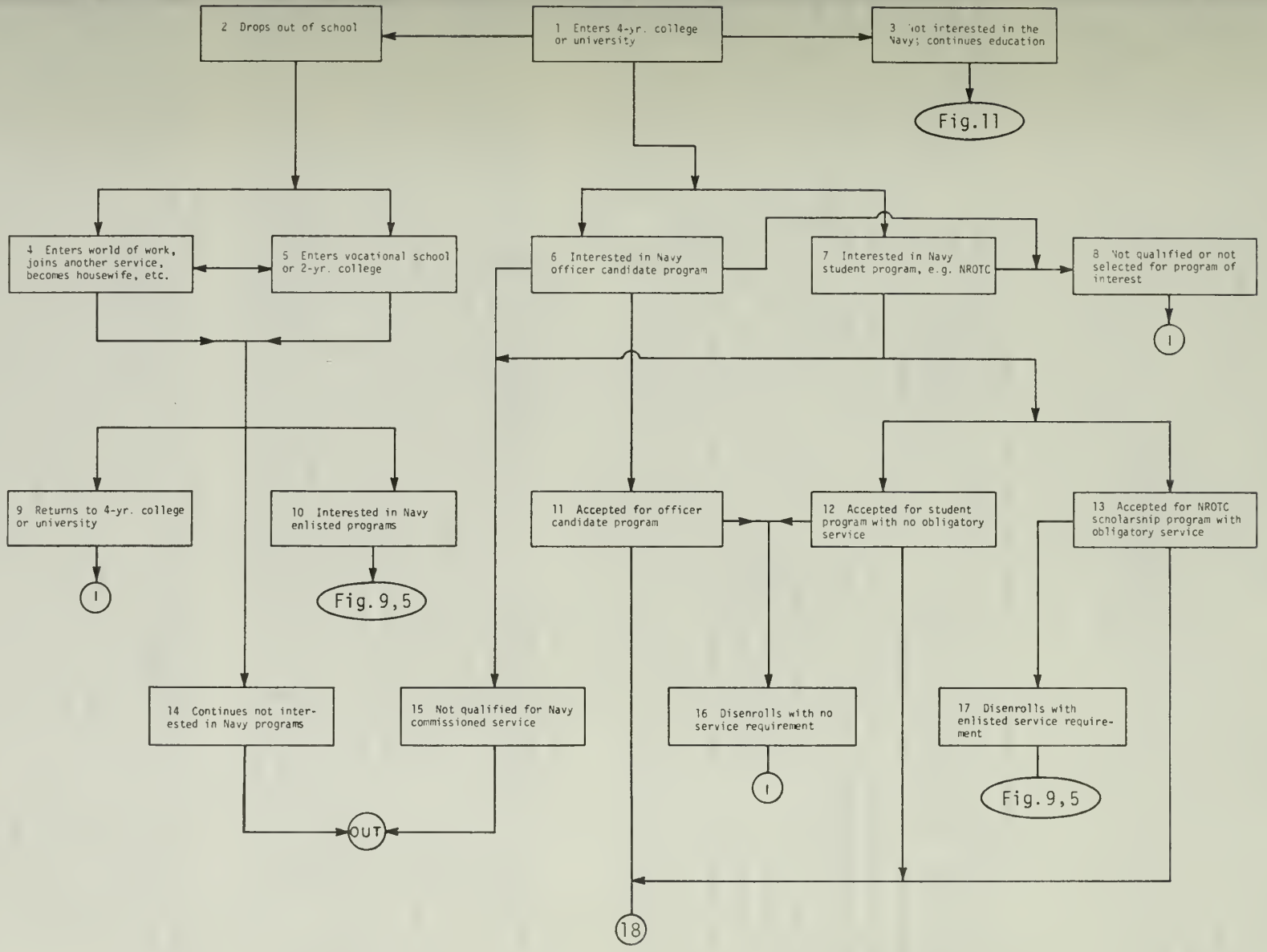



Figure 10. Flowpaths of individuals who enter a 4-yr. college or university and drop out of those who are interested in Navy undergraduate student programs.

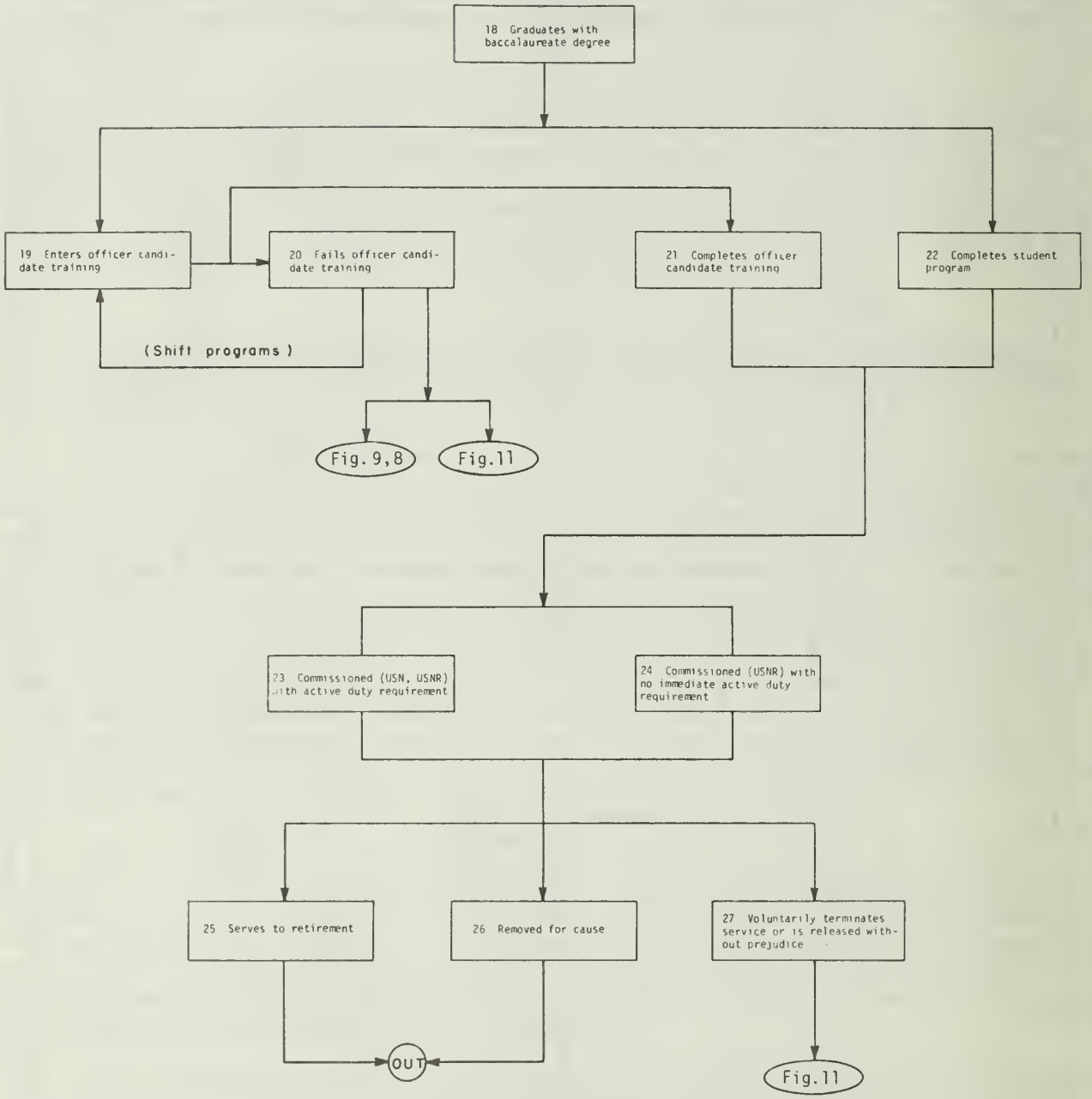



Figure 10. (Continued)

as a permanent loss to Navy service, he might be eligible, theoretically, for some enlisted programs. However, the probability that he would apply for one or be accepted by the Navy is exceedingly remote. The individual showing an interest in Navy programs may also find that he is not qualified for the program of interest (Block 8) because of failure to meet specific program requirements, academic standing (i.e., wrong year in school), or physical requirements for the specific program (such as an air officer candidate). He may not be selected for the program because there is no opening at the time he expresses an interest. In any of these cases, the individual will remain eligible for other programs if he continues his education.

Officer Candidate Programs. Beginning with the second semester of his freshman year, a student may enter a number of Navy officer candidate programs (Block 6). The only program available at this stage is the Reserve Officer Candidate (ROC) program, which is designed to provide the Navy with unrestricted line officers immediately upon, or shortly following, graduation. This is accomplished by sending the student to the Officer Candidate School, Newport, Rhode Island, either during two summer vacations or one summer and immediately following graduation. In his sophomore year he becomes eligible for the Aviation Reserve Officer Candidate (AVROC) program. In this program the student is sent to the Air Officer Candidate School (AOCS) at Pensacola, Florida during the summer between his junior and senior years and after he graduates. The impact of the ROC and AVROC programs is that a student becomes identified with a Navy officer-procurement program early in his undergraduate education and may complete some of his officer candidate training before graduating. He is discouraged from entering the AVROC program in his upper-division years.

In his junior year, a student becomes eligible for the following air officer candidate programs: (1) the Aviation Officer Candidate (AOC) program,(2) the Naval Flight Officer Candidate (NFOC) program, and (3) the Naval Aviation Officer Candidate Special Duty Intelligence (NAOC-AI) program. In these programs, the officer candidates enter AOCS at Pensacola, Florida (Block 19) following graduation (Block 18) and continue with primary flight training. Those who cannot complete the AOC or NFOC programs for physical reasons may be given a chance to shift to the NAOC-AI program or, having completed AOCS, they may be commissioned in the Reserve and given inactive duty (Block 24). If the candidate successfully completes primary flight training, he is commissioned an ensign ( Block 23) and continues basic and specialty training.

A student becomes eligible for several other officer candidate programs in his junior year, including the Navy Nurse Corps Candidate Program (NNCCP) and the Officer Candidate (Women) Program. The Nurse Corps candidates are commissioned prior to graduation and enter active duty when they commence travel to the Naval Officer Training Center (NOTC), Newport, Rhode Island for indoctrination. Nurses may also enter these programs from acceptable hospital programs that lead to a diploma in nursing or a certification as a nurse anesthetist. The women officer candidates receive 16 weeks of training at the Women Officer School, Newport, Rhode Island--8 weeks during the summer between their junior and senior years and 8 weeks following graduation. Successful completion of this program leads to a commission in the Naval Reserve as a line or Supply Corps officer with an active duty requirement (Block 23).

When a student has completed his junior year and has only one more year of schooling remaining, he is eligible for the Nuclear-Power Officer Candidate (NUPOC) collegiate program. The candidate must travel to Washington and successfully pass a personal interview with the Director, Division of Naval Reactors (AEC). If he completes the interview successfully, he is immediately enlisted and undergoes a short indoctrination course in Washington. Throughout his senior year, he is an active duty enlisted man (E3) with full pay and benefits. Upon graduation, he enters the Officer Candidate School (OCS) at Newport. Upon successful completion of OCS (Block 21), he is commissioned in the Naval Reserve and enters active duty (Block 23). Following his technical nuclear training, he is required to accept a Regular Navy commission, if tendered. If he disenrolls from or fails the NUPOC (Collegiate) program at OCS (Block 20), he is required to complete his active-duty enlisted service requirement as shown by the direction of the flow to Block 8 in Figure 9.

The student who has completed his junior year and has only one more year left of schooling can apply for a number of other officer candidate programs. These programs include several areas in the staff corps, restricted line, and unrestricted line designators. The latter includes those for NUPOC submarine, surface, and instructor fields. Women students are eligible for the instructor fields designator. The submarine and surface NUPOC candidates must undergo an interview in Washington, as mentioned for the NUPOC Collegiate program. All candidates in these programs are accepted only after they complete their undergraduate education and receive their diploma. They then attend a 19-week cours at NOTC Newport and are commissioned in the USNR with active-duty service (Bloc 23). Distinguished NOTC graduates will be so designated and tendered Regular Navy appointments about 3 months following their initial appointment.

These officer candidate programs are extremely important to the Navy and constitute a major effort in officer recruiting because they provide the necessary flexibility in maintaining the required (programmed) officer levels. Because of lengthy lead times, most Regular Navy programs do not provide this fle ibility. In addition, if voluntary terminations and other sources of normal attrition do not provide a sufficient reduction in the officer force during declining requirements, the active-duty Reserve officer is a prime source for involuntary reduction in force (Block 27). Thus, officer candidate procurement programs are more likely to be affected by fluctuations in quotas and require dynamic recruiting efforts to meet impending shortages, as shown in Figure 2. Similarly, within the officer candidate programs, there is an increase in the degree of flexibility from the lower-division to the upper-division and immedia post-graduate programs, with the latter programs providing a degree of flexibil measurable in days.

Navy Student Programs. The flow for some of Navy student programs begins when the interested individual is still in the senior year of high school. How ever, the flow into Navy student programs at the college level begins at Block 7 in Figure 10. It should be understood that some of the processing that is de scribed below actually takes place just prior to one's entry into college. As in the case of those who were interested in officer candidate programs, the stu dent may not be qualified for Navy commissioned service (Block 15), in which case he is a loss to the system. If he is not qualified or not selected for hi program of interest (Block 8), he returns to the flow at Block 1. A qualified student can choose between those programs that provide a substantial scholar-

ship (Block 13) and those that do not (Block 12). The primary difference is that the scholarship programs result in an active-duty service requirement and may require a period of active enlisted service, if the student should drop out of the program (Block 17). The programs in Block 12, do not, generally, entail obligatory service upon termination (Block 16).

The most important of these programs, as far as the Navy is concerned, is the NROTC Scholarship (Regular) Program. The purpose of this program is to educate and train well-qualified young men and women for careers as Regular Navy commissioned officers. Accordingly, it is especially important to determine that an applicant is reasonably disposed to making the Navy a career. Successful applicants are appointed midshipmen in the U.S. Naval Reserve and are provided tuition and textbooks, instructional fees, a monthly subsistance allowance, and Government-furnished uniforms when training. In addition to the usual scholastic screens for college entrance, the applicant must take the Strong Vocational Interest Blank (SVIB) test, which is scored at Great Lakes Naval Station using a special Navy scale. The applicant must also pass a physical examination administered and reviewed at the DoD Medical Review Board, Colorado Springs, Colorado, and undergo an interview with two Naval officers in the NRD through which he is submitting his application. The recruiting and selection of students is under the immediate supervision of COMNAVCRUITCOM. The NRD is provided a list of applicants that is continually updated to show the status of each candidate during the application period prior to a new school year. It is the task of the NRD to ensure that all aid (and exhortation) is given the applicant in completing the necessary documentation (which is considerable), physical examination, and interviews. Selection is made centrally by a board convened near NAVCRUITCOM headquarters. Notification of successful and unsuccessful applicants also becomes a responsibility of the NRD concerned, and special care is exercised to ensure that unsuccessful applicants are personally notified in a manner that will maintain their interest in and respect for the Navy. Students who successfully complete the program (Block 22) are commissioned in the USN (Block 23) and have an obligated period of service of not less than 4 years.

Closely allied with the Regular NROTC program is the NROTC College (Nonsubsidized) Program, often referred to as the NROTC "contract" program. The Recruiting Command does not recruit for this program. Rather, it is handled by the resident Naval Faculty at the student's institution. The applicant enlists in the Naval Reserve during his junior or senior years, has one summer of training, and, upon graduation and completion of requirements, is commissioned in the USNR with active duty for 3 years (Block 23).

One other program of importance within the family of NROTC programs is the NROTC Two-Year Nuclear Propulsion Candidate Scholarship Program. Its purpose is to create yet another channel for the procurement of nuclear propulsion officers, since it has become increasingly difficult to meet nuclear program requirements. It is called a 2-year program because it takes place during the student's junior and senior years. Actually, an entrant into the program goes to a Naval Science Institute at Newport, Rhode Island, in the summer between his sophomore and junior years. He is then on a par with students in the other NROTC programs and completes his junior and senior years as a midshipman in essentially the same manner as students in the NROTC Scholarship (Regular) program, with similar benefits. It is called a candidate program, since the individual is not actually accepted for the nuclear power training program

until he is ready to complete his senior year. At that point, his course becomes more like that of an officer candidate in that he goes through the same type of interview with the Director of the Division of Naval Reactors and other qualification steps. If he is accepted in the program, he is commissioned and commences 1 year of nuclear power training. If he is not accepted into the nuclear program, he is commissioned and serves just as any other NROTC graduate. Those who complete the nuclear power training have an obligatory service of 5 years, while those who do not have only the regular 4-year obligation. Those who drop out of the program (after successfully completing the Naval Science Institute) will incur an obligation to serve in an enlisted status (Block 17).

There are several other minor programs at the undergraduate level and programs for which application may be submitted prior to graduation. The latter will be considered elsewhere since, for all practical purposes, they are contingent upon the attainment of the baccalaureate degree. One set of undergraduate student programs provides ensigns in several specialties for the Medical Service Corps. Unlike the scholarship programs, accepted students are commissioned as ensigns and placed on active duty with all pay and allowances. They are responsible, however, for their own educational expenses. Upon reporting to their first duty assignment, these officers are obligated for 3 years of active duty. Disenrollees are obligated to serve 2 days of active duty for each day of participation in the program, but each case is adjudicated individually by the Chief of Naval Personnel.

Disposition of Those Who are Commissioned. Those who are commissioned through the various programs described above may serve to retirement (Block 25) or they may be removed for cause (Block 26) and their commissions terminated. In either case, they are no longer in the flow for recruiting purposes. Others may voluntarily terminate their commissions or they may be released from active duty without prejudice (Block 27), such as reduction in force. Depending on their status, these individuals will return to the flow and still be eligible for Navy service.

## Flowpaths of Individuals Who Graduate with a Baccalaureate Degree Without Taking Part in a Navy Undergraduate Student Program

The flowpaths of individuals who graduate from a four-year college or university without taking part in a Navy undergraduate student program are shown in Figure 11. Several paths are available to the new graduate with a baccalaureate degree (Block 1). Although the possibility that he may be interested in Navy enlisted programs (Block 2) is remote under ordinary circumstances, it may occur more frequently with difficult economic conditions and scarcity of jobs. At one point during the Vietnam War, after many were initially deferred to finish college, one out of every four new recruits was a college graduate. Thus, the services can place and use college graduates within the enlisted ranks. The graduate may also continue his education by entering graduate school or a professional school (Block 3). In this case, his relationship vis-a-vis the Navy will take a different form and his flowpaths at the next stage will be discussed later. The graduate may still not be interested in Navy programs (Block 4) and may enter a vocation, become a housewife, etc. (Block 8). If he continues his lack of interest in the Navy he eventual

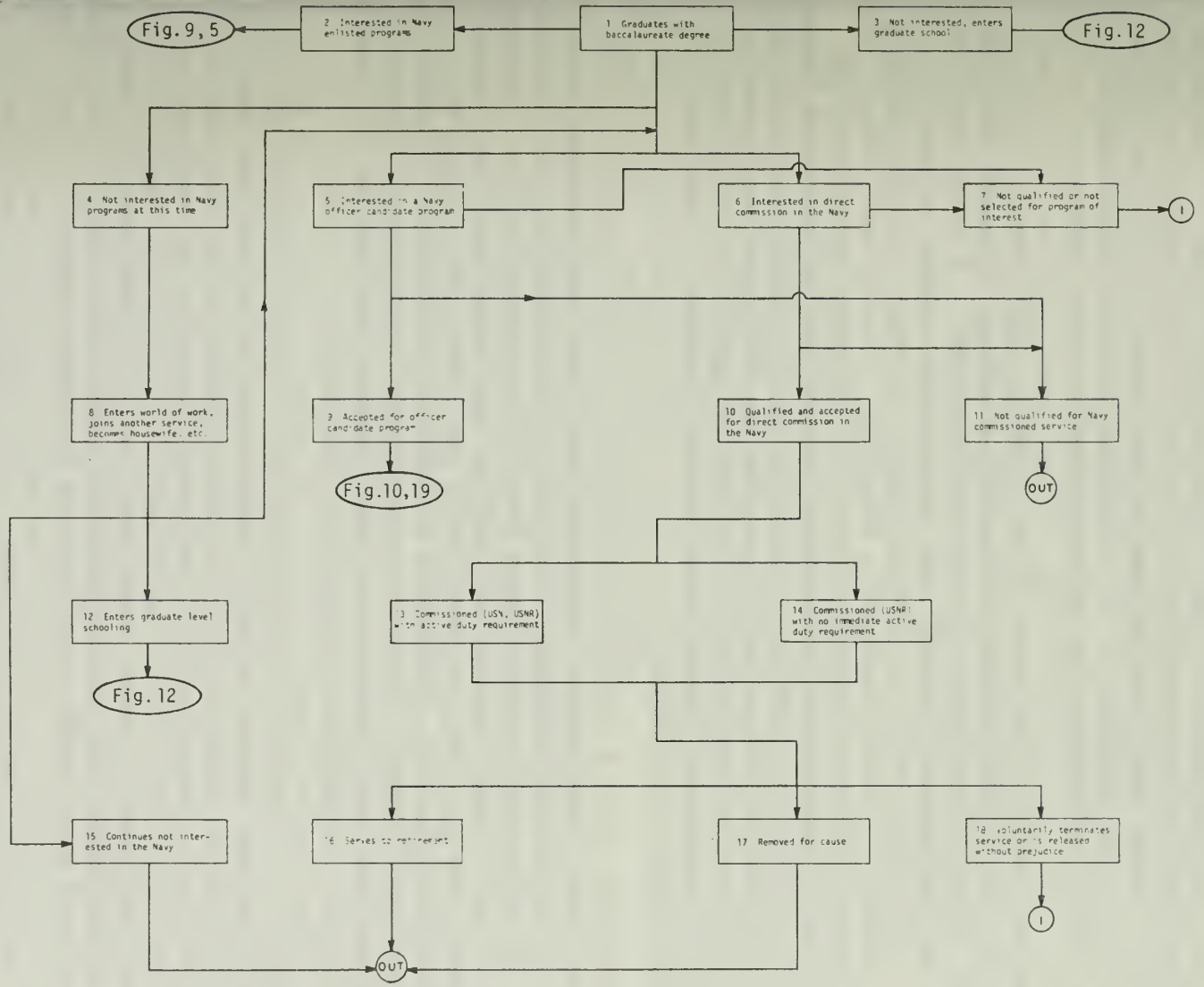



Figure 11. Flowpaths of individuals who graduate from a 4-yr. college or university without taking part in a Navy undergraduate student program.

becomes a loss to the system (Block 15). However, before he reaches this point, he may decide to enter graduate-level schooling (Block 12), his flowpath will join those at Block 3. Finally, he--along with other new graduates--may be interested in participating in one of the officer candidate programs (Block 5) previously described (assuming he has not passed the maximum age limits) or in obtaining a direct appointment as a commissioned officer (Block 6). In either case, he may find that he is not qualified or selected for a program of interest (Block 7). If he is not qualified for commissioned service in the Navy (Block 11), he is a loss to the system. If he is accepted for an officer candidate program (Block 10), his flow path merges with others in this category.

Those who are qualified and accepted for a direct appointment as a commissioned officer in the Navy (Block 10) may choose between programs that lead to active duty (Block 13) and those that do not (Block 14). A large number of programs have both active and inactive duty appointments. This is true of the following specialties within the Medical Service Corps: aerospace physiology, medical technology, radiation health, dietetics, occupational therapy, physical therapy, and health care administration. All of these specialties except radiation health are open to both sexes. Some of the programs have internship or special training requirements in addition to the academic requirements. Those who are accepted for the active duty option are obligated for 3 years of service. An exception in this occurs in the case of nurses who are directly commissioned after graduating from approved training programs. They are obligated for only 2 years of service.

If an individual holds a baccalaureate degree in certain specialty areas (i.e., public affairs, meteorology, cryptology, and naval intelligence), he will be considered for a direct appointment as a special duty officer in the restricted line with inactive duty. Appointments are in the grade of ensign. However, if he holds a master's degree he may be appointed as a lieutenant junior grade in the appropriate field. Both male and female applicants are considered in these fields, and they must be, generally, at least 19 and not over 34 years of age at time of appointment. Those who are appointed must undergo training that will improve their qualifications as naval officers and must serve 6 years in the Naval Reserve, including 5 in the ready reserve.

If an individual holds a baccalaureate degree in several appropriate engineering fields, he may receive a direct appointment in the civil engineer corps, USNR, with either active or inactive duty. In the former case, the term of obligated service is 6 years with 3 years of active duty; in the latter, 6 years of inactive duty, the first 5 of which are in the ready reserve. There are also direct appointments in the restricted line, with inactive duty, for engineering duty officers (EDO) and aeronautical engineering duty officers (AEDO) Appointment is for 6 years, with the first 5 in the ready reserve.

There is one special program for women, which leads to a direct appointment as an unrestricted line officer (1105) in the USNR with inactive duty. The term of obligated service is 6 years, with the first 5 in the ready reserve.

As with the case of individuals receiving their commissions through officer candidate programs, those receiving commissions via direct appointments may serve to retirement (both on active duty or inactive duty) (Block 16), be removed for cause (Block 17), or voluntarily terminate service or be released without prejudice (Block 18). In the first two instances, they will be a loss

to the system; in the latter, they may return to the flow as persons still eligible for Navy service.

## Flowpaths of Individuals Who Enter Graduate Level Education and Drop Out or Those Who Accept a Navy Graduate-Student Program

Attention now turns to individuals who enter graduate-level education and either drop out or accept a Navy graduate-student program. This individual is identified in Block 1 of Figure 12. (The individual who is not interested at all in Navy programs and continues his graduate education is described later.) He might drop out of school (Block 3), in which case his flowpaths are similar to those of dropouts at other levels. That is, he may have an immediate interest in Navy enlisted programs (Block 7), officer candidate programs (Block 12), or direct appointment to commissioned status (Block 17) or, after having entered the world of work (Block 8), he may become interested in Navy programs or return to graduate-level education (Block 13).

The student of particular interest at this stage is the one who has an immediate interest in one of the Navy's graduate-student programs (Block 4). If he is not qualified or just not selected for his program of interest (Block 5), he reenters the pool of students in graduate education (Block 1). If he is not qualified for Navy commissioned service (Block 6), he will be a loss to the system. The graduate level programs (Blocks 9 and 10) are for the Judge Advocate General (JAG) Corps, the Chaplain Corps, the Medical Corps, the Dental Corps, and the Medical Service Corps.

To participate in the JAG Corps Student Program, the student must be enrolled or anticipate enrollment in a school approved by the American Bar Association. Accepted applicants (Block 9) are appointed as ensigns in the USNR and remain on inactive duty while attending school. They attend school at their own expense and receive pay and allowances only when they are on active duty training. They can train with a reserve JAG unit as a drilling reserve, but this is not mandatory. They undergo an 8-week officer indoctrination course at Newport, Rhode Island, during the summer between their second and third year or if they joined the program late in law school, during the period after their admission to the bar. Those who are in this student program benefit by accruing longevity credits when they enter active duty. Students who have graduated from law school, completed the officer indoctrination course, and been admitted to the bar are sent to a 10-week course at the Naval Justice School at Newport. If they complete this course successfully (Block 15), they are obligated to accept a JAG Corps appointment that supersedes their original appointment and serve on active duty for 3 years, with a total service obligation of 6 years (Block 19). Disenrollment from the program (Block 21) may result in a requirement to serve on active duty as a Naval Reserve officer for a period up to 3 years in whatever capacity the Navy determines to be in its best interests.

The Chaplain Corps Student Program is very similar to the JAG program, except that there is no active duty obligation (Block 10). To be eligible, the student must be enrolled in an approved theological school. Accepted applicants are appointed ensigns on inactive duty, and they must attend an 8-week chaplain school during the summer preceding their last year in the seminary or immediately following graduation. They can be drilling reservists while students, and

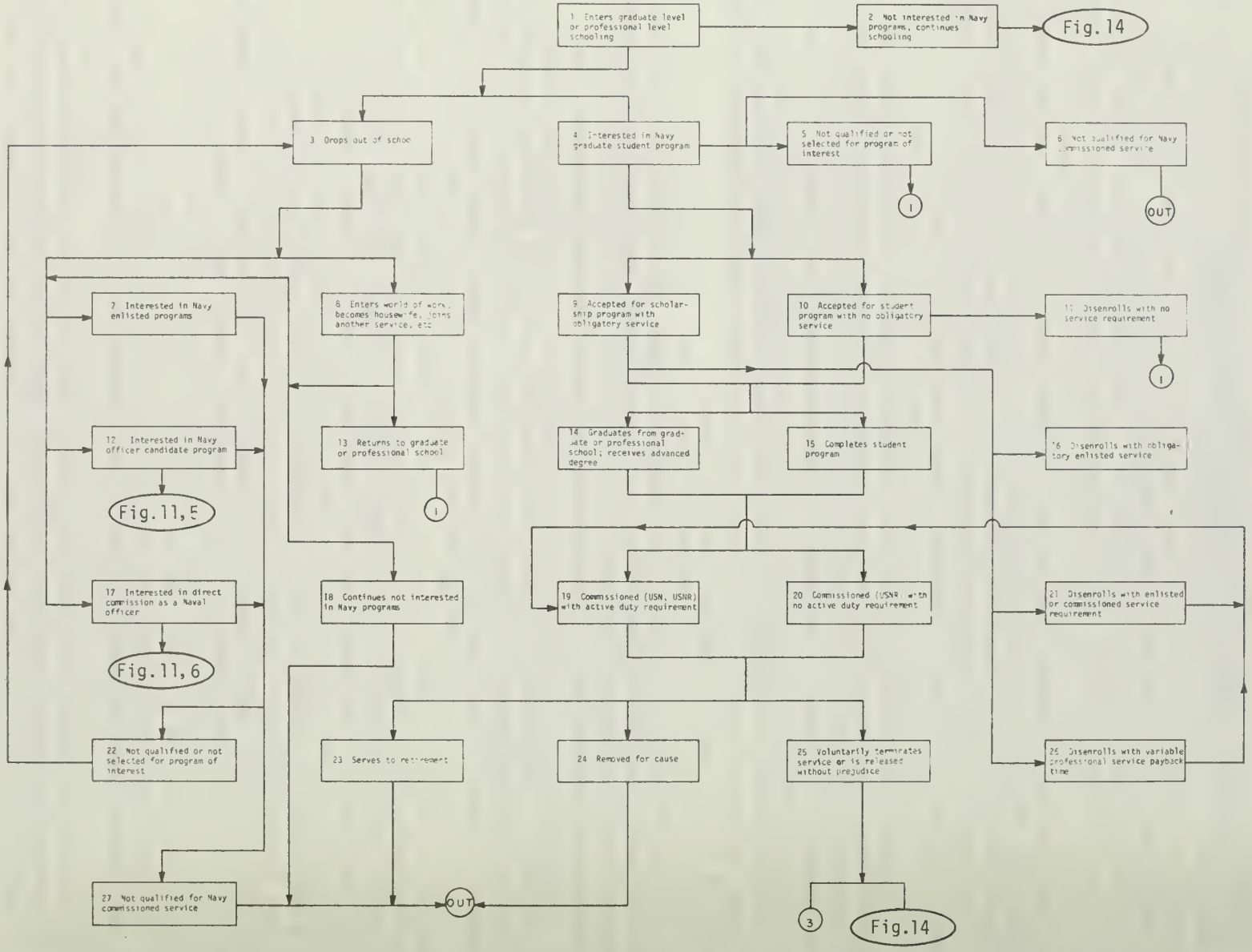



Figure 12. Flowpaths of individuals who enter a graduate level program of education and who drop out of school and/or accept a Navy graduate-student

they accrue longevity for pay purposes during their student appointment. Those who successfully complete the program (Blocks 14 or 15) are obligated to accept a superseding appointment in the Chaplain Corps and serve for 6 years in an inactive status (Block 20). All students must be endorsed by the appropriate ecclesiastical endorsing agency of the student's denomination before he is tendered the superseding appointment. Those who desire to do so may apply for active duty, and, if selected, serve on active duty in the Chaplain Corps (Block 19). Students who do not complete the program successfully or who disenroll are urged to resign their ensign commissions without penalty (Block 11).

There are many student programs at the graduate or professional school level in the field of Navy medicine. Those in the Medical Corps are representative and typical of student programs in the other corps and will be treated in greater detail to establish the common characteristics of these programs. Applicants that become eligible for more than one program can be processed as dual applicants, if qualified.

One of the Medical Corps programs is the Medical/Osteopathic Student (1915) Inactive-Duty Program. Applicants for this program must be accepted for, or be enrolled in a medical school approved by the American Medical Association (AMA) or a school of osteopathy approved by the American Osteopathy Association (AOA). Accepted applicants are appointed as ensigns and placed on inactive duty while attending school. Up to 60 days of active duty training per year is made available to the student. Graduates of medical school are tendered a superseding appointment as a lieutenant, and male officers are obligated to serve 2 years on active duty, if they have not already completed their active duty requirement (in some other category). Males who have completed their active duty requirement and female ensigns may request active duty. Thus, the program provides input to both Blocks 19 and 20.

Students in medical school become eligible in their senior year for the Medical/Osteopathic Student Program (Active Duty). As the title signifies, accepted students are commissioned in the reserve in the rank for which they are eligible and serve on active duty with all pay and allowances while pursuing their senior year studies. After they have completed their internship or first-year graduate medical education (medical education after graduation from medical school with the M.D. degree), they are obligated to serve 3 years on active duty as medical officers. Students in the 1915 Inactive-Duty Program (see above) are given preference for this program.

Another Medical Corps program for medical school students is the Armed Forces Health Professions Scholarship (AFHPS) Program. This program has counterparts in the Dental Corps and the Medical Service Corps. Accepted students (Block 9) are appointed ensigns in the Naval Reserve and serve on inactive duty while in school, except for 45 days of active-duty training per year. Normal tuition and school expenses are paid by the Navy, and the student is reimbursed for books and supplies. He is paid a $400 monthly stipend (except for active-duty training periods). Graduates who complete the student program (Blocks 14 or 15) enter active duty in the Fleet and are obligated for a minimum of 2 years of service for the first 2 years (or any part of the first 2 years) of support under the program. In addition, they are obligated, on a year-for-year basis, for educational support provided in excess of 2 years. Disenrollment from the program may require the student to serve 2 or more years of ac-

tive service as an elisted man or officer, depending on his qualifications at the time of disenrollment (Block 21).

All AFHPS students must participate in the First Year Graduate Medical Education Program, in which they serve on active duty in their appointed grad while engaging in their graduate medical education program. Other medical students that have not obtained positions in AMA or AOA placement plans may also participate. This program does not fit into the flowcharts, but is included here as a continuation of the medical-school support programs. The Navy's Active Duty Delay Plan for Specialists Program falls into a similar category. This program leads to an appointment in the Medical Corps, U.S. Naval Reserve, on inactive status, while completing civilian residency training or a research project, and requires a period of active duty upon completion o the training or project.

The following Dental Corps programs are direct counterparts of the Medical Corps programs: (1) an inactive duty Dental Student Program, (2) an acti duty Dental Student Program, and (3) an AFHPS program for dental students. There is also a Navy General Practice Residency Program in Dentistry that provides for appointment in the grade of lieutenant for active duty and a 1-year rotating residency training in a Navy teaching hospital. Selected applicants must request augmentation into the Regular Navy and enter general dental duty upon completion of the residency. The others must serve on active duty for 2 years following completion of the residency.

The Medical Service Corps AFHPS program is a counterpart of these progra in the Medical and Dental Corps. Eligibility for this program is limited to (1) students in good standing in an accredited college of optometry and who are within 6 months of commencing the final 2 years of the academic program, and (2) clinical psychology students entered in doctoral (Ph.D.) level traini who have completed 1 year of their graduate training.

The Navy student programs in the Medical Service Corps that are commence at the undergraduate level can be continued at the graduate level. The accep ed student is appointed an ensign in the Naval Reserve and serves on active d with all pay and allowances while completing his education. Except for docto al programs in nutrition in the dietetics field, all of the others are at the master's level and an applicant must be within 24 months of completing his Ph or master's degree. The fields which are associated with specialty areas wit in the Medical Service Corps are dietetics (nutrition), physical therapy, occupational therapy, and hospital administration/health care administration. Those who successfully complete the program must serve on active duty for 3 y Those who disenroll may be required to serve 2 days for every 1 day of school ing received under the program (Block 26).

Officers who serve in an active or inactive status following completion these student programs will serve to retirement (Block 23), be removed for ca (Block 24), or voluntarily terminate service or be released without prejudice (Block 25). However, the reentry of these officers into the flow of qualifie military availables may be limited, since their advanced age may make them in eligible for most of the programs which have been previously described. Beca of their professional qualifications, it is highly unlikely that they would e serve in any other status than that for which they were originally commission Nevertheless, the possibility does exist that a professional person may decid to change professions and leave the service to do so.

## Flowpaths of Individuals Who Graduate From a Graduate School or Professional School Without Having Entered a Graduate School Program

When an individual graduates from a graduate school or professional school, he passes the final milestone in his educational progression. At this stage, as shown in Figure 13, graduates of foreign professional schools, particularly medical schools, may enter the flow (Block 3). The number of such applicants may be considerable when such an event occurs as the mass evacuation of persons from Cuba to the United States. (Many individuals in the medical profession had matriculated at medical schools in Spain.) Some graduates from foreign medical schools are United States citizens who took their medical education at foreign, English-language schools, such as those at Guadalajara, Mexico, and in the Philippines. These individuals qualify in several ways to enter the flow, but the most prevalent is by certification on an equivalency examination conducted by the Educational Council for Foreign Medical Graduates at Philadelphia, Pennsylvania.

Those entering the flow at this stage are primarily in the health fields--medical, dental, and allied sciences. Graduates in the fields of law and theology also enter the flow, as do those who continued on to graduate degrees in the areas that qualified individuals for direct appointment at the baccalaureate level. The latter will not be discussed here, since they entered the programs previously described and not new programs that require the graduate degree. For example, an engineer with a doctorate would enter the same direct-appointment program as the engineer with a bachelor's degree in the same field.

Most of the graduates in Block 1 are not interested in Navy programs at this time (Block 2). They enter professional careers, become housewives, etc. (Block 4), and may continue to be uninterested until they are lost to the system (Block 9) because of age or the number of years that have elapsed since graduation. However, many who enter civilian, professional employment (including self-employment) (Block 4) may still be interested in becoming a commissioned officer in the Navy (Block 5). That is why hospitals are a frequent stop for officer recruiters. Those who express an interest in Navy commissioned programs at this time join the flow of individuals who expressed such an interest upon graduation from their professional or graduate schools (Block 5). Although some of these individuals may not be qualified for the particular program that interests them (Block 6), they may still be eligible for other programs that could be of interest. If they are not qualified for Navy commissioned service (Block 7), they are lost to the system. If they are qualified, they may be accepted for a direct appointment (Block 8) in a commissioned grade.

The programs for direct appointments in the JAG Corps or the Chaplain Corps are essentially the same as those for entering the commissioned ranks in these corps through student programs. Appointees are commissioned in the Naval Reserve, for a period of 6 years of either active (Block 10) or inactive (Block 11) duty. In the former case, he must serve 2 years of active duty; in the latter, 5 years in the ready reserve. Additionally, a JAG Corps appointee must be appointed for a specific opening in a Naval Reserve Law Company, unless a waiver is granted by COMNAVCRUITCOM.

There are three categories of direct appointments in the Medical Corps and Dental Corps. Qualified graduates from acceptable schools can be appointed

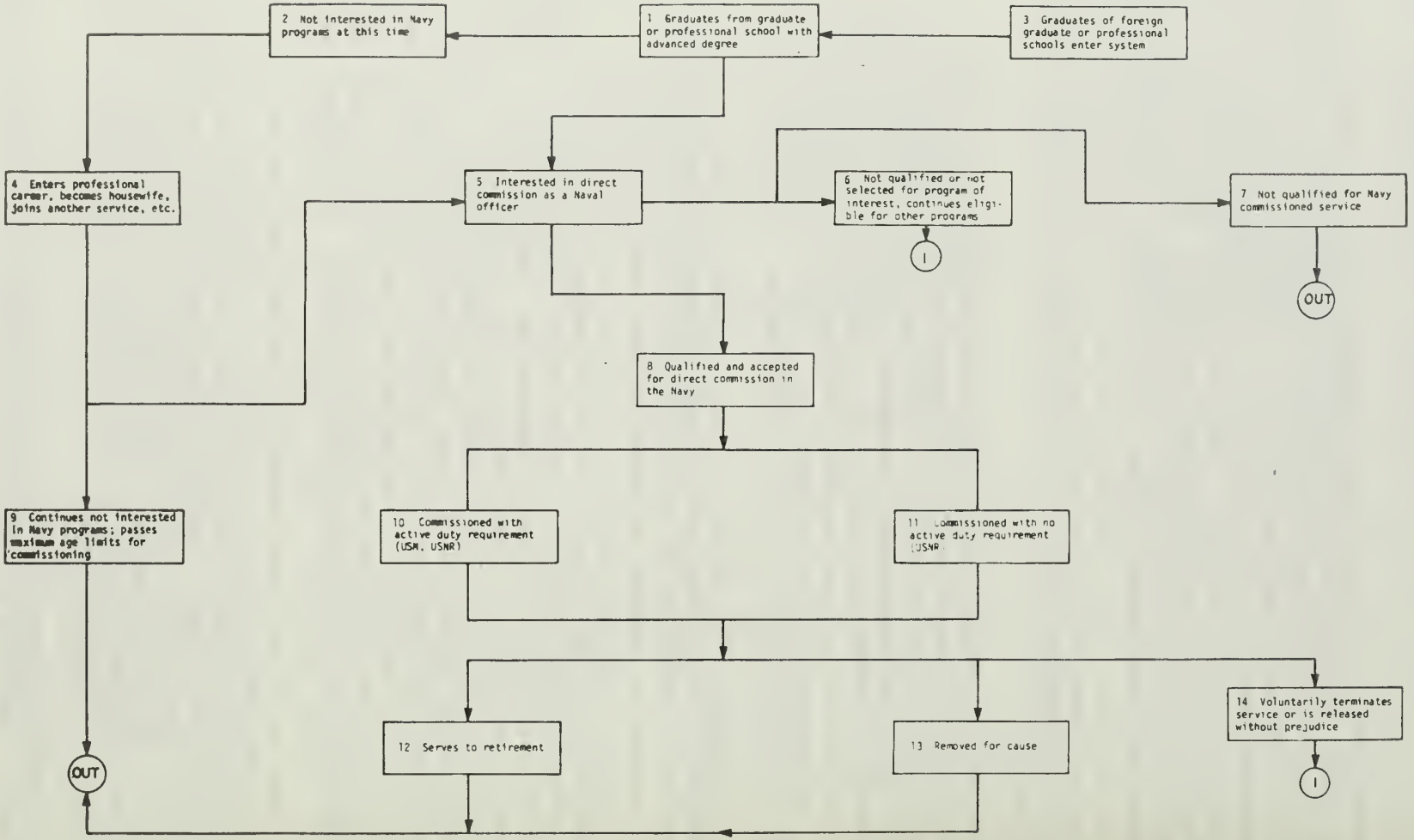



Figure 13. Flowpaths of individuals who graduate from graduate or professional schools without accepting a Navy graduate student program, including graduates

in (1) the USNR with active duty (Block 10), (2) the USNR with inactive duty (Block 11), or (3) the Regular Navy (USN) with active duty (Block 10). Appointees in the Dental Corps Naval Reserve, can be up to 51 years of age, since the maximum age of 48 can be incremented by as many as 3 years of prior active service. However, such an appointee must have graduated from dental school no more than 10 years before the effective date of appointment.

The direct-appointment program in the Medical Service Corps, as in the case of lawyers and theologians, is in the USNR with active (Block 10) or inactive (Block 11) duty. Advanced degrees will, of course, qualify individuals for appointment in the programs previously mentioned at the baccalaureate level. The areas where new programs open are primarily in the medical allied sciences, which require at least a master's degree or the completion of 2 years in a doctorate program. Other programs that open up for qualified graduates from acceptable schools are in the optometry, pharmacy, and podiatry sections of the Medical Service Corps.

Appointees in these programs may serve to retirement (Block 12), may be removed for cause (Block 13), or they may voluntarily terminate their commissions or be released without prejudice (Block 14). Some of the persons in Block 14 may still become eligible for other programs. For example, a Medical Service Corps officer might terminate his commission and enter medical or dental school and become eligible for one of the student programs or the direct appointment programs in those areas.

The creation of a medical school for the Armed Forces of the United States will relieve much of the pressure that currently exists to recruit individuals in the health fields.

# FLOWPATHS OF QUALIFIED MILITARY AVAILABLES (QMAs) WHO ARE INTERESTED IN NAVY ENLISTED PROGRAMS

## Overview

This section examines the flow of individuals who are interested in joining the Navy in an enlisted status. Specifically, the flow emphasizes those who are 17 years of age or older and who have had no prior service. Within recruiting circles, the terms "chargeable accession" and "Quebec" are used to identify male enlistees in this category.

## Flowpaths of Individuals Who Do Not Enter the Direct-Ship Option

### Initial Contact and Interview Arrangement

As shown in Figure 14, the individual interested in Navy enlisted program (Block 1) may either contact the Navy himself (Block 2) or be personally contacted by the Navy (Block 3). He may contact the Navy himself in the following ways:

1. He may walk into a recruiting station (Block 4) and say, "I want to join the Navy." Because "walk ins" are an important source for the Navy, recruiting stations are now located in places where many young people congregate or frequent, such as shopping centers rather than in the post-office basement. However, because of the current rigid standards and quotas, the "walk in" may become a liability to the recruiter. This is especially true in resort areas or vicinities with special attractions, where there may be a large number of casual walk ins. These individuals take a great deal of the recruiter's time--which turns out to be largely nonproductive because of the disproportionately large number of individuals who are either not qualified for enlistment or not genuinely interested in joining the Navy. On the other hand, in resort areas frequented by college students, such as certain Florida beaches, recruiters have found walk ins to be an excellent source of officer candidates. Thus, the casual walk in is not as good a source for enlisted service as might be expected because his Navy potential has not been established prior to the face-to-face interview with a recruiter.

2. He may send a national advertising clipout from a magazine to the Navy Opportunity Information Center (NOIC) at Pelham Manor, New York. These clipout inputs are referred to the recruiting station in the sender's vicinity and screened for obvious disqualifications, such as age or insufficient schooling. If the individual is under age, the NOIC sends him a package of attractive promotional material and enters pertinent information into a computer file for possible future activation. This computerized information system not only supplies future inputs, but also is useful in screening out those who attempt to abuse the recruiting process. The efficiency of the referral system may be questionable, however,since important qualitative information is not available on the individual, and the inquiry may be as casual as the walk-in. A system for following up referrals has been established to determine the effectiveness of the referral system.

3. He may send in a clipout from a recruiting aid placed by the recruit at advantageous locations (banks, schools, etc.) or he may answer a classifie

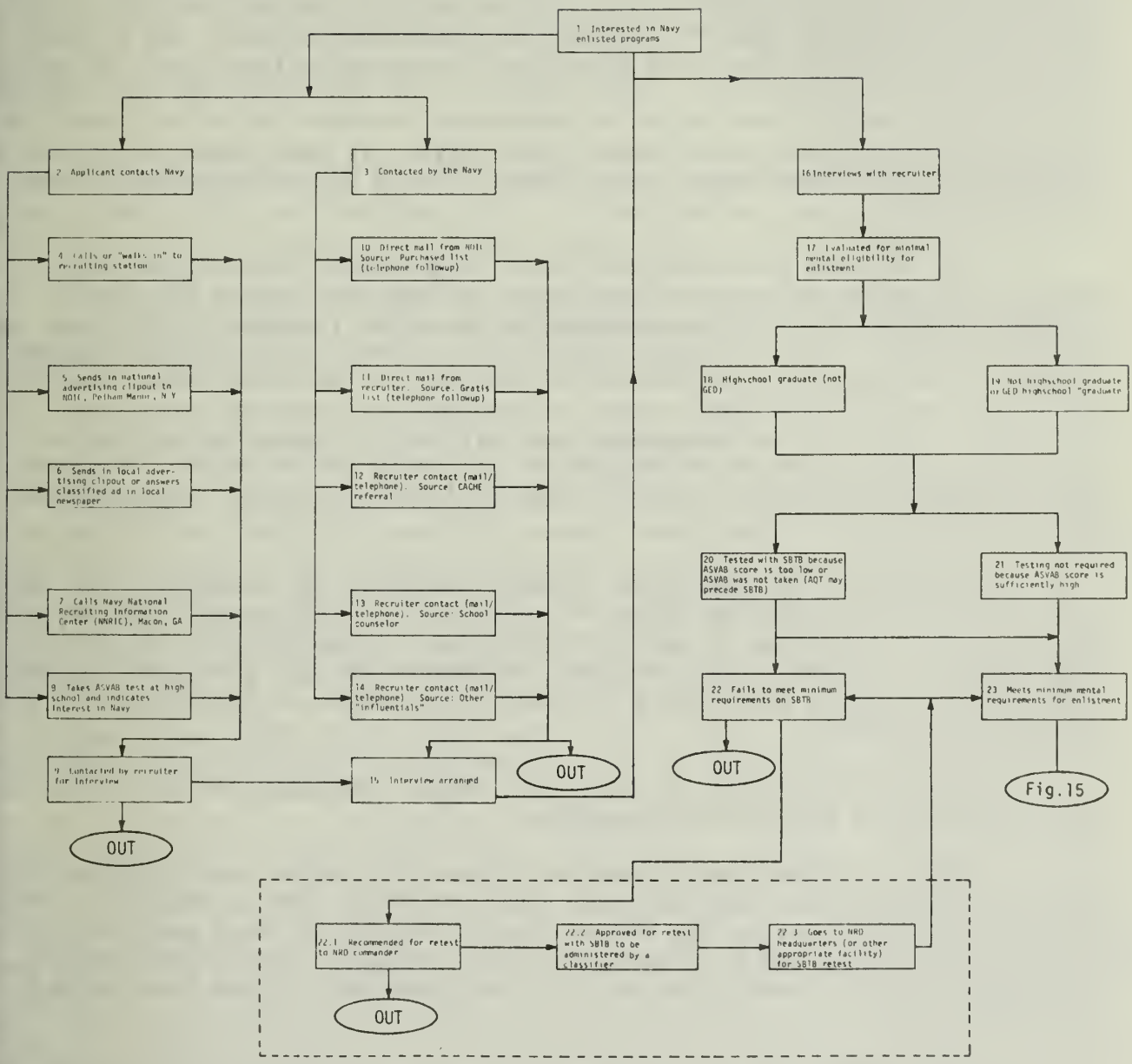



Figure 14. Initial contact with and establishing mental eligibility of individuals who do not enter direct-ship option.

ad inserted in the local newspaper by the recruiter (Block 6). Both recruiting aids and classified ads in the local newspaper have been good sources for leads.

4. He may call the Navy National Recruiting Information Center (NNRIC), Macon, Georgia (Block 7). The wide-area telephone number is easily obtained, either from national advertising in printed publications or from public-servic spot features in the electronic media (television and radio). The trained recruiter who answers the phone attempts, in an unobtrusive manner, to obtain personal data from the call. During the call, he determines the location of the recruiter nearest the caller and determines whether the caller should get in touch with the local recruiter or vice versa. In most cases, the recruiter is able to ascertain whether the individual should be contacted now, later, or probably never.

5. He can take the ASVAB test at his high school and indicate that he intends to enter the military after graduating from high school (Block 8). The printout of the test results provided the recruiter includes (1) his name and telephone number, (2) a complete record of his scores on the ASVAB component tests, (3) an estimation of his mental category on the Armed Forces Qualification Test, and (4) his ASVAB scores transformed into aptitude area scores of the Navy. The individual who takes the test and indicates that he has no specific plans after graduation may also be called by the recruiter. Accordingly the printout of ASVAB test results is perhaps the single most important lead for the recruiter.

No matter how the individual contacts the Navy, the recruiter will contac him to arrange an interview (Block 9). At this initial contact, the recruiter may be able to determine whether the individual is qualified or not for military service. If he is not qualified, he goes out of the flow, as indicated o the chart. If he is qualified and remains interested, an interview will be arranged (Block 15).

As shown in Figure 14, an individual may be contacted personally by the Navy (Block 3) by the following methods:

1. NOIC in Pelham Manor, New York (Block 10), after receiving his name from Grey Advertising (who purchases lists of names from a commercial firm) sends him a letter suggesting that he might consider the Navy as a possible career and inviting him to contact his local recruiter for further details. The local recruiter receives a copy of the letter and follows it up with a telephone call.

2. An enterprising recruiter who has access to lists usable for his purposes sends him a letter and follows it up with a telephone call (Block 11). Since the recruiter cannot purchase such lists, he must develop sources that will provide them gratis. The most common source is the high-school counselor and the most common list is the list of new graduates.

3. A recruiter contacts by mail or phone individuals referred by enliste in CACHE (a holding arrangement that permits delayed entry into the service) (Block 12). An individual in CACHE who provides three leads that also enlist may enter his recruit training in enlisted pay grade 2 (E-2), rather than

pay grade 1 (E-1), and thereby make some 30 dollars a month more. In other words, an individual in CACHE can act as a recruiter for the recruiter and provide leads that are likely to enlist and be qualified to enlist.

4. A recruiter who has obtained the individual's name from his school counselor (Block 13) contacts him by mail or phone. The counselor not only knows the after-graduation plans of his senior students, but may have an important part in formulating many of those plans. Close and harmonious contacts with the counselor may prove most beneficial both to the Navy recruiter and to the individual high-school student who is uncertain as to his future plans.

5. A recruiter who has obtained the individual's name from other sources (Block 14) contacts him by mail or phone. As a group, these sources are frequently referred to as "influentials," and include the parents and family of the individual, his church, and other organizations in the community.

During the initial contact for arranging an interview (Block 15), facts may be brought out that indicate that the individual is not qualified for enlistment, in which case he is a loss to the system.

## Establishing Mental Eligibility for Enlistment

During the initial interview (Block 16), most recruiters attempt to determine whether the individual meets the mental requirements for enlistment (Block 17). Most recruiters feel that there is no reason to discuss possible Navy programs with the applicant unless his mental qualifications and aptitudes, as identified by test scores, are available. In evaluating an individual's mental qualifications, consideration is given to whether or not he is a high-school graduate (Blocks 18 and 19). For this categorization, an individual holding a high-school equivalency certificate based on passing the General Educational Development Test (GED) is not considered a high-school graduate. As previously mentioned, the individual's acceptance of the social order, as evidenced by his completion of high-school education, seems to make a difference in his adaptation to service life. Accordingly, a high-school dropout must meet higher mental standards for enlistment than a high-school graduate. Thus, the system is definitely biased against the high-school dropout, since the very fact that he is a dropout implies that he is less likely to meet minimal mental standards than the high-school graduate. In addition to the high-school graduate-nongraduate dichotomy, there is another categorical distinction that is not shown on the flowchart. This distinction requires that female applicants be classifiable as "school eligible" in order to be mentally qualified for enlistment. The category "school eligible" is a quality measure for reporting purposes and does not determine whether the applicant can be enlisted for a school program. A "school eligible" is essentially a person who scores at or above the median in a general aptitude measure. The basic mental requirements for enlistment in the Navy are summarized in Table 2 by AFQT and Wechsler Adult Intelligence Scale (WAIS) categories (Wechsler, 1955). As the table shows, a female applicant must score 1.33 standard deviations higher than her male counterpart to be eligible for enlistment.

Table 2

Minimum Mental Requirements for First-Term Enlistment

| Individual | AFQT Score, Category | WAIS IQ, Category |
|---|---|---|
| Male, high-school graduate | 21, Upper IV | 80, Dull normal |
| Male, high-school dropout | 31, III | 90, Average |
| Female, applicant | 49, Upper III | 100, Above average |

Another consideration in evaluating the individual's mental qualifications is whether he has taken the ASVAB test (Block 20) and, if he has, whether his scores are high enough for enlistment (Block 21). If the recruiter or the applicant feel that the ASVAB results do not give a true picture of the individual's qualifications, the recruiter will probably administer the Short Basic Test Battery (SBTB). If the applicant fails the SBTB (Block 22), he can be retested (Block 22.1 through 3). If he fails the second time, he can still be tested on the Basic Test Battery (BTB). In fact, if the recruiter is concerned about the qualifications and test-taking ability of the applicant, he may use some other test, such as the AQT, to screen the applicant first. This, of course, provides the recruiter with important information while not using up one of the"chances" that the applicant has for a formal determination of his qualifications. If the applicant very obviously fails to meet the minimum requirements on the SBTB (Block 22), he will be so informed and be lost to the system.

If the individual attains a sufficiently high score on the ASVAB (Block 21) or on the SBTB, he meets minimal mental requirements for enlistment (Block 23).

## Exploring Programs of Interest

The problem of eligibility and the possibility of additional testing arise again when the applicant begins to explore the many enlistment options available to find one that is of interest to him and for which he is qualified (Figure 15). If the applicant is female (Block 25), there will be restrictions or limitations as to the programs she can consider. However, some of the male programs have special counterpart programs for women in the Navy. If a person contemplates enlistment in a reserve program only (Block 25), special programs or reserve counterparts of regular programs are available. The "Other USN" category shown in Block 25 may be eligible for a variety of programs that cut across the entire field of careers and job fields. These include a special program for the Philippines; incentive packages based in schoolporting. overseas homeporting, buddy programs, and special recruit companies; and special programs such as the medical technologist training program and the Navy music program. These special programs will not be discussed in detail; they are mentioned here to call the reader's attention to the broad extent of available programs

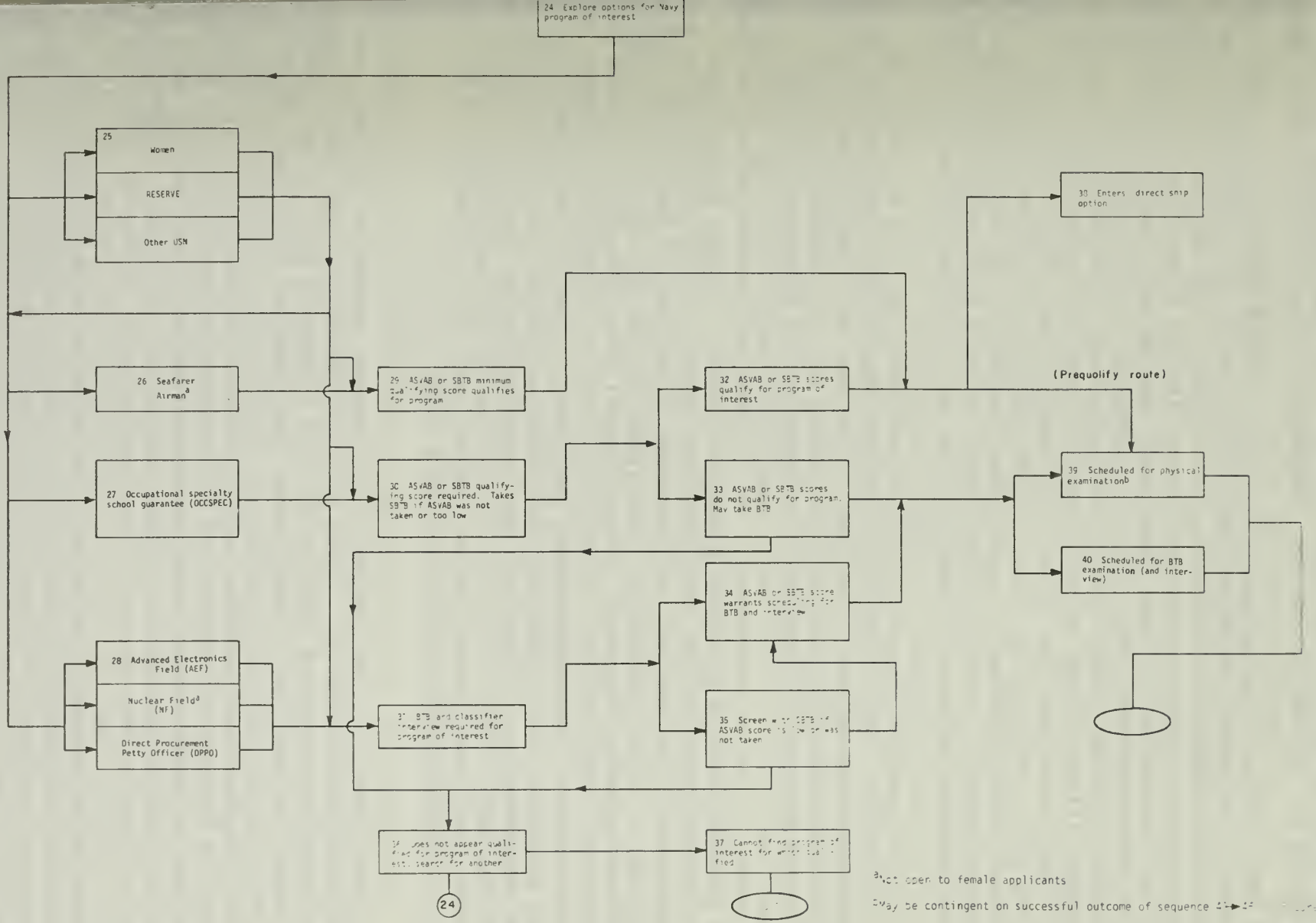



Figure 15. Exploring programs of interest to individuals who do not enter the direct-ship option.

and the task that is placed on the recruiter if he is to provide intelligent counsel on all of them for the best interests of the individual and the Navy.

The Seafarer/Airman program (Block 26) provides the basic enlistees for the Navy. The term of enlistment may be for 3 or 4 years, and there is no guaranteed assignment to a Navy Class "A" school. Four-year male enlistees have a choice of coast and overseas homeporting and a guaranteed apprenticeship (with exceptions); 4-year female enlistees are only guaranteed retention of the Seaman Apprenticeship--the airman program is not open to them. The applicant can enter this program if he meets the minimum qualifying score for enlistment (Block 29) and is not disqualified for some other reason. Once qualified, he can take the "direct ship" route (Block 38) or prequalify (Block 39) and wait for a shipping date. If the applicant is interested in the reserve enlisted program only, he can enter the rubric, 2X6 ATP (Apprenticeship Training Program). The term of enlistment is for 6 years with a continuous active duty obligation of 24 months, either as a Seafarer, Airman, or Subfarer.

The Occupational Specialty/School Guarantee block (27) includes, for this study, two closely related but separate Navy enlisted programs and three reserve enlisted programs. The first of the Navy enlisted programs guarantees the enlistee specialty school training within a broad occupational field (17 fields for men, and 14 for women). For example, the supply and accounting occupational field includes courses for storekeepers, disbursing clerks, ship's servicemen, aviation storekeepers, and aviation maintenance administrationmen. This program does not guarantee a specific school. Rather, the enlistee is eventually assigned to the school that best meets his qualifications (as determined by the RTC classifier) and the needs of the Navy at the time the enlistee completes his recruit training. This situation can, and does, lead to devastating misunderstanding on the part of the enlistee if he did not understand, was not fully made aware of, or willfully chose to ignore the contingent nature of the contract. Each occupational field has its specific requirements in terms of scores on the ASVAB or the BTB tests, along with special physical and other requirements. In addition, each school or course has its own requirements that may be more restrictive than those for the occupational field. In general, high-school graduation is "desired" for males and mandatory for females. The term of service is 4, 5, or 6 years.

The second Navy enlisted program that fits into block 27 guarantees the enlistee a specific Class A school. The program is open to both male and female high-school graduates. There are requirements for each course stated in terms of scores on the ASVAB or the BTB, along with physical and special requirements. A qualified classification (personnelman) determines, by means of an interview, whether the individual is qualified for a specific school. The reserve programs that guarantee a Class A specialty school are: (1) a subprogram of the previously mentioned 2X6 program, designated 2X6 (A), (2) the Ready Mariner program which requires the male enlistee to undertake basic and specialty school training in an active-duty status (4 months) followed by 6 years of inactive duty as a drilling reservist, (3) the Reserve Female Enlistee Program (RFEP), which is similar to the Ready Mariner program, and (4) a 3X6 Reserve TAR program which requires the enlistee to serve on active duty for his recruit and specialty school training and then continue on active duty for 3 years at a reserve facility in the TAR (Training and Administration of the Reserve) program. The total enlistment for the TAR program is for 6 years. The Navy Recruiting Command actively recruits for all of these programs under the "One Navy" concept.

If the individual does opt for one of these occupational or school programs in Block 27, his test scores become critical (Block 30). If the ASVAB was taken and the scores qualify him for the program (Block 32), he is ready for further processing. This includes a physical examination (Block 39) and, in the case of those interested in the school guarantee program, an interview with the classifier. When one qualifies on the basis of ASVAB scores, a complication may arise if the results of the BTB administered at the RTC conflict with those of the original ASVAB. Commitments made on the basis of the ASVAB scores are honored, but the individual may be rather strongly "counseled" to change his program to one more appropriate for his qualifications. At the time this study was made in the field, the SBTB could be used to qualify the applicant for most of the OCCSPEC programs (Block 32), but since then, qualifications are stated only in terms of ASVAB or BTB scores. If the ASVAB scores are low, but the individual convinces the recruiter that he could do better, the recruiter might administer the SBTB to obtain another estimate of the person's capabilities. If SBTB results are high enough to qualify the individual for his program of interest, he would be scheduled to continue processing (Blocks 39 and 40). If the applicant still fails to qualify, he can be given the opportunity to take the BTB with the classifier (Block 33). In most cases, however, the recruiter will convince the applicant that he does not qualify for the program of interest and should look for another (Block 36). If the individual does not find another program of interest for which he is qualified (Block 37), he will be lost to the system.

The programs shown in Block 28 all require an applicant to take the BTB and be interviewed by a classifier. Enlistment in the Advanced Electronics Field (AEF) program leads to training in a Class A school with subsequent assignment to schools that provide additional and advanced levels of instruction in the electronics field. The program is designed to provide inputs into the important, electronically-oriented ratings of the Navy that involve data, communication, fire control, and sensing systems and the electronics warfare area. Because of the extensive formal training requirements, the term of enlistment is 6 years. Applicants, both male and female, must be high-school graduates, achieve minimum aptitude area scores on the BTB, and be interviewed by a classifier. As in the case of the occupational specialty programs, the specific school or specialty area is not guaranteed but determined during the individual's recruit training.

The Nuclear Field (NF) program provides naval nuclear propulsion plant operators for both submarine and surface ships. The term of obligated service is 6 years. The program is only open to male applicants, who must be high-school graduates and meet requirements based on various combinations of the BTB. Special emphasis is placed on a demonstrated aptitude for completing technically-oriented subjects in high school, especially mathematics. Applicants must be interviewed by a classifier. Acceptance into the program leads to one of four Class A schools (not specifically guaranteed in advance), the basic nuclear power course, and the nuclear propulsion plant operator course. Most of the students who successfully complete the courses are assigned to submarines.

The Advanced Technical Field (ATF) program, which is similar in scope and recruiting procedures to the AEF and NF programs, was formalized after this investigation was conducted. The program is designed to provide a supply of high quality personnel for the following ratings: Interior Communications Electrician, Hull Maintenance Technician, Hospital Corpsman, and Radioman. A

limited number of females, to whom separate quotas are allocated, are also recruited for the program. The program differs from the AEF and NF programs in that a specific Class A school is guaranteed, and the individual continues in the program only if he graduates in the upper half of his class at the Class A school. Otherwise, the requirements are identical.

The Direct Procurement Enlistment Program (DPEP) and the Vocational Schc Graduate Education Program (VSGEP) are designed to attract individuals with schooling, training, or work experience in technical areas, offers a guarantee assignment in a specialty and advanced pay status upon entry into service. Ap plicants must meet the basic standards for enlistment and, in addition, must attain a score of 45 on the GCT score of the BTB. The critical qualifications however, are a combination of education and experience that are used to determine eligibility for the program, eligibility for a particular pay grade upon entry into the service, and the schooling or assignment pattern required. The classifier determines whether the applicant has these qualifications and enlistment is approved by the NRD commander or the Chief of Naval Personnel (with the concurrence of special staff commands when indicated), depending on the technical area and the grade in which the applicant will be enlisted.

As stated previously, all programs in Block 28 require a classifier interview (Block 31). Since this usually requires the applicant to travel to th NRD headquarters where the classifier is located, the recruiter should be relatively certain that the individual is qualified for the program (Block 34) before he recommends such travel. If the test scores and other information (Block 35) indicate that the applicant is not qualified for the program of interest (Block 36), the recruiter will urge him to reenter the cycle and attempt to find another Navy program of interest for which he may be qualified. If the applicant fails to do so, he will be lost to the system (Block 37). Those who meet minimum test scores and are not disqualified for other reasons will join the flow from the other programs in a trip to the AFEES and the NRD headquarters for a physical examination (Block 39) and BTB testing and interview with the classifier (Block 40).

To provide the reader with an appreciation of the magnitude and relative recruiting effort involved among the various programs, Table 3 presents the short-range planning goal of NAVCRUITCOM for FY74 in enlisted program areas.

## Exploring Possible Causes for Disqualification

Early in his processing, and based initially on his verbal assurances, an applicant will be evaluated against certain categories of personal history and physical defects that might disqualify him from enlistment in the Navy (Figure 16).

Personal Causes. Some of the personal causes for disqualification are listed in Block 42. In general, the criteria used for assessing the seriousness of causes for disqualification are (1) the Navy must have personnel of good moral character to preserve an image that is conducive to the enlistment of high-quality personnel and (2) the individual should be judged on his overall value or worth to the Navy, rather than on bits of evidence. The latter

Table 3

Navy Short-Range Planning Goals for Enlisted Programs in FY 74

| Programs | Subtotals | Totals |
|---|---|---|
| Seafarer/Airman[a] | | 7,450 |
| Nuclear Field | | 4,365 |
| Advanced Electronics Field | | 5,375 |
| School Guarantee/ Occupational Specialty | | 50,910 |
| Reenlistments[b] | | 7,200 |
| Waves | | 5,000 |
| Reserves[c] | | 16,318 |
| 2X6 | 9,818 | |
| A School | 7,407 | |
| ATP | 2,411 | |
| 3X6 A School | 280 | |
| 4X10 | 6,220 | |
| A School | 5,048 | |
| ATP | 1,172 | |
| DPPO[d] | Goal of 50/paygrade/selected rating | |
| Phillipine Recruiting | | 420 |

ote: From Exhibit II-4, NAVCRUITCOM Marketing Plan for FY 74.

From November 1973 through May 1974, the Seafarer/Airman monthly quota was limited because there will be sufficient school seats for all Q accessions.

The floor is 600/month with a maximum allowed of 1000/month; each reenlistment over 600 in a given month will result in a reduction of one Q accession recruit (quota).

In FY 74 300 Air and 300 Surface WAVE Reserves will be recruited.

The current goal of 50/month will be increased as demand is increased following the advertising campaign. Actual annual goal is 50 per rating, per paygrade for those ratings in Groups A and B of the Open Rates List. DPPO is a non-add goal which may be recruited as a Quebec, Reenlistee, or Wave.

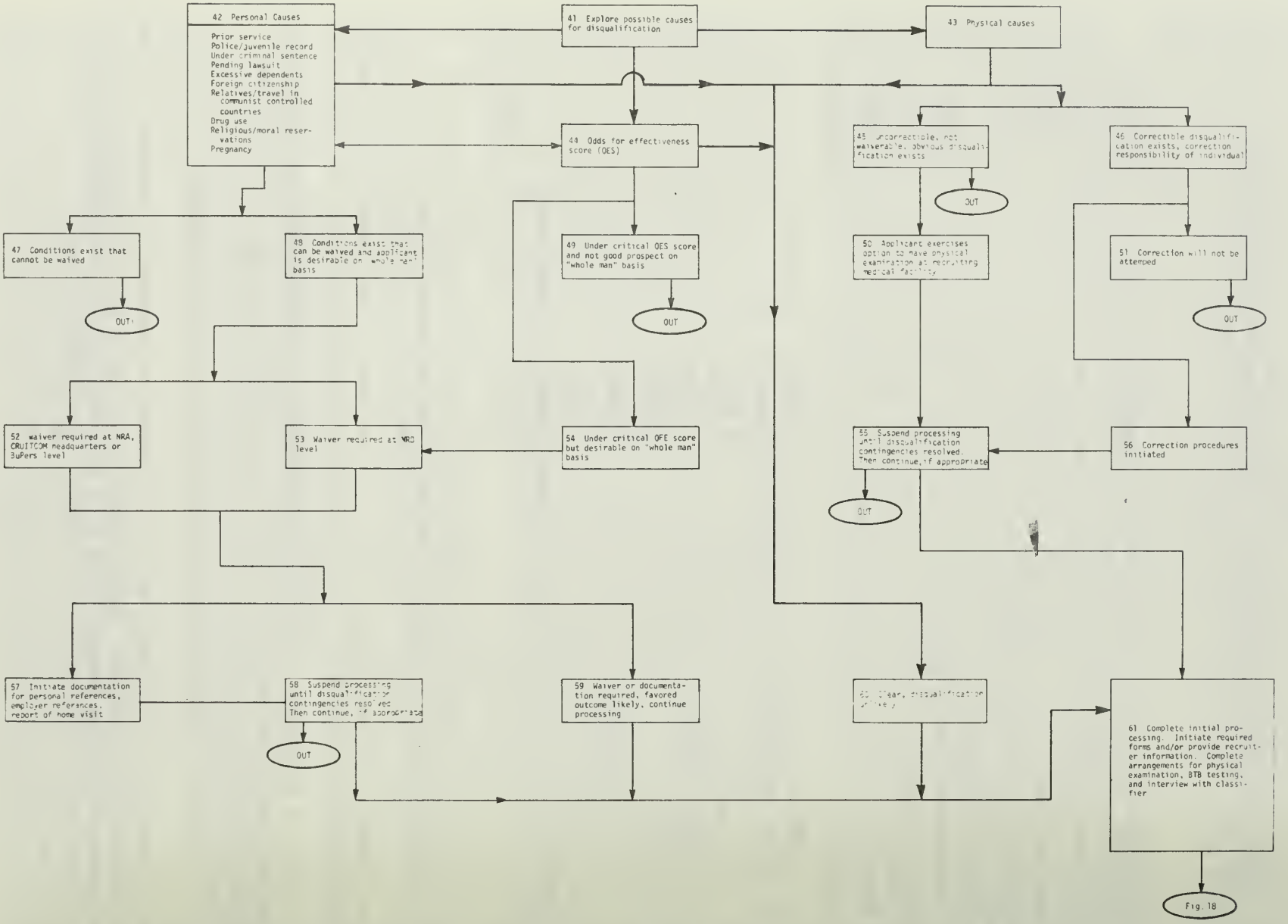



Figure 16. Exploring possible causes for disqualifying individuals who do not enter the direct-ship option.

criterion is referred to as the "whole man" concept. Although individuals in recruiting find it difficult to define the "whole man" concept, they usually end up by asking, "Would I like to sail with him?" The Navy is quite realistic about conditions in society and is not prudish in its search for individuals with good moral character. For example, applicants who have no more than five minor traffic violations within 1 year or one minor, nontraffic offense are eligible for enlistment without waiver considerations. Similarly,persons in the waiver chain (Blocks 48, 52, 53) are permitted to waive offenses or character blemishes if they feel such action is warranted based on assessment of the individual's current character and motivations. For example, admitted drug use in the past is not necessarily an automatic criterion for disqualification; rather, the case is evaluated on its current merits.

On the other hand, the Navy seems to be pessimistic about the difficulties that enlistees with dependents have. Accordingly, married persons are not encouraged to enlist unless they are "particularly desirable." Servicemen in the first three paygrades cannot reenlist if they have more than two dependents. When it comes to assessing the seriousness of disqualification causes related to information security, the criteria become quite severe. For example, an applicant can be disqualified if he has travelled and/or resided extensively in a foreign country or if he has relatives who reside in certain communist-dominated countries and who are not there because of service in the United States Government or in direct support thereof.

There are other factors that must be considered in evaluating personal background, the most important of which is the sensitivity of the area in which the applicant desires to serve. For example, the criteria are severely tightened for the advanced electronics and the nuclear fields.

Guidance documents and the listed qualifications are quite specific about conditions that cannot be waived (Block 52). In some cases, the instructions specifically warn those in the waiver chain not to submit a request waiver for a condition that cannot be waived. Thus, if the applicant has a condition that cannot be waived, he is very definitely a loss to the system (Block 47). Other documentation states what causes can be waived and at what level waiver authority exists. For example, waivers for nonminor misdemeanors can be authorized by the NRA commanding officer, while waivers for felony offenses must be authorized by the commander of the NRA. Other cases must go to the NAVCRUITCOM level or to the Chief of Naval Personnel. Since waivers that can be authorized at the NRA level (Block 53) are still within the recruiter's unit, they can be quickly obtained, at least in principle, and further processing of the applicant can proceed (Block 59). On the other hand, waivers that must be authorized at the NRD level (Block 52) require complete documentation. At the NAVCRUITCOM headquarters level, a board of review comprising all officers in the Enlisted Programs Branch must agree on a waiver case. Accordingly, processing of the applicant who requires a waiver at the NRA or NAVCRUITCOM levels will probably be suspended (Block 58) until disqualification contingencies are resolved. If they are not resolved in his favor--at any level of the command--he is disqualified and becomes a loss to the system.

Odds for Effectiveness (OFE) Score. The Odds for Effectiveness (OFE) Table shown in Figure 17 is used as an aid in calculating the probability that an applicant will be an effective performer; that is, one who completes his initial

The Odds for Effectiveness (OFE) Table is for use as an aid in estimating the odds for naval effectiveness for prospective first term enlistees. An effective sailor is defined as one who completes his period of active duty obligation and is recommended for reenlistment. The odds for effectiveness scores are based upon the results of research conducted over a period of six years with a group of approximately 11,000 enlistees who entered the naval service in 1960. The Table was updated in 1968. The odds scores are the chances in 100 that an applicant, if enlisted, will render effective service. To determine the odds score for a particular applicant, start at the left-hand side of the table (in the column marked "Test Score") and follow the line running to the characteristics which describe his background. The score appearing in the last column is the applicant's odds for effectiveness. For example, if an applicant obtains an SBTB G + A + M score of 170, completed eleven years of schooling, and was expelled from school once, he would have 73 chances in 100 of rendering effective naval service. When an applicant attains a score enclosed in a parenthesis (68 or below), a reevaluation *must* be made and an OFE score waiver in writing be entered in the enlisted service record of any such applicants considered to be eligible for enlistment. It should be emphasized that the OFE Table is an aid for recruiters to rank applicants and select the best applicants for enlistment.

| Test Score | Highest Grade Completed | Expuls. and/or Suspens. | Arrests without Traffic Violations | OFE Score Categories | Odds for Effectiveness Score |
|---|---|---|---|---|---|
| AFQT 65-100 | 12+ | None | | A | 93 |
| | | One | | | 88 |
| | | Two+ | | | 79 |
| | 10-11 | None | | B | 79 |
| | | One | | | 73 |
| | | Two+ | | | (58) |
| | 9 & under | None | | | (59) |
| | | One | | | (52) |
| | | Two+ | | | (36) |
| AFQT 54-64 | 12+ | 0-1 | None | C | 90 |
| | | | One | | 85 |
| | | | Two+ | | 78 |
| | | Two+ | None | | 79 |
| | | | One | | 71 |
| | | | Two+ | | (63) |
| | 11 | 0-1 | None | D | 79 |
| | | | One | | 71 |
| | | | Two+ | | (62) |
| | | Two+ | None | | (63) |
| | | | One | | (53) |
| | | | Two+ | | (43) |
| | 9-10 | 0-1 | None | E | 72 |
| | | | One | | (63) |
| | | | Two+ | | (53) |
| | | Two+ | None | | (55) |
| | | | One | | (45) |
| | | | Two+ | | (35) |
| | 8 & under | 0-1 | None | | (59) |
| | | | One | | (49) |
| | | | Two+ | | (39) |
| | | Two+ | None | | (40) |
| | | | One | | (31) |
| | | | Two+ | | (23) |
| AFQT 41-53 | 12+ | 0-1 | None | F | 89 |
| | | | One | | 83 |
| | | | Two+ | | 76 |
| | | Two+ | None | | 77 |
| | | | One | | 69 |
| | | | Two+ | | (59) |
| | 11 | 0-1 | None | G | 77 |
| | | | One | | 69 |
| | | | Two+ | | (59) |
| | | Two+ | None | | (60) |
| | | | One | | (50) |
| | | | Two+ | | (40) |

| Test Score | Highest Grade Completed | Expuls. and/or Suspens. | Arrests without Traffic Violations | OFE Score Categories | Odds for Effectiveness Score |
|---|---|---|---|---|---|
| AFQT 41-53 | 9-10 | 0-1 | None | H | 70 |
| | | | One | | (60) |
| | | | Two+ | | (50) |
| | | Two+ | None | | (52) |
| | | | One | | (42) |
| | | | Two + | | (32) |
| | 8 & under | 0-1 | None | | (56) |
| | | | One | | (46) |
| | | | Two+ | | (36) |
| | | Two+ | None | | (36) |
| | | | One | | (28) |
| | | | Two+ | | (20) |
| AFQT 31-40 | 12+ | 0-1 | None | J | 86 |
| | | | One | | 79 |
| | | | Two+ | | 71 |
| | | Two+ | None | | 77 |
| | | | One | | (63) |
| | | | Two+ | | (53) |
| | 11 | 0-1 | None | | 72 |
| | | | One | | (63) |
| | | | Two+ | | (53) |
| | | Two+ | None | | (55) |
| | | | One | | (45) |
| | | | Two+ | | (35) |
| | 9-10 | 0-1 | None | K | (65) |
| | | | One | | (55) |
| | | | Two+ | | (45) |
| | | Two+ | None | | (46) |
| | | | One | | (36) |
| | | | Two+ | | (28) |
| | 8 & under | 0-1 | None | | (50) |
| | | | One | | (40) |
| | | | Two+ | | (31) |
| | | Two+ | None | | (32) |
| | | | One | | (24) |
| | | | Two+ | | (17) |
| AFQT 30 & below | 12+ | None | | L | 83 |
| | | 1 or 2 | | | 72 |
| | | 3+ | | | (52) |
| | 11 | None | | | 71 |
| | | 1 or 2 | | | (58) |
| | | 3+ | | | (36) |
| | 10 & under | None | | | (62) |
| | | 1 or 2 | | | (48) |
| | | 3+ | | | (28) |

Figure 17. Odds for effectiveness table for use with Navy applicants for enlistment.

active-duty obligation successfully and is recommended for reenlistment. The table was developed after 5 years of research using actuarial data on 11,000 enlistees who entered Naval service in 1960; and it was updated in 1968. To determine the OFE score for a particular applicant, the recruiter starts at the left-hand side of the table at the appropriate AFQT score, and follows the lines running to the applicant's particular background characteristics (i.e., highest grade of school completed, number of expulsions and/or suspensions from school (if any), and number of arrests other than traffic violations (if any)). If the applicant's score is, say, 73 (Block 44, Figure 16), it means that his chances for being effective are 73 out of 100. This table is not to used rigidly but as a screening device, along with the recruiter's assessment of the applicant on the basis of the "whole man" concept. Thus, if the applicant's OFE is 68 (the cut-off point) or below, and the recruiter feels that he is a good prospect (Block 54), processing can continue if a waiver is granted by the commanding officer of the NRD (Block 53). However, if the applicant scores below the critical score of 68 and the recruiter does not feel he is a good prospect, he can be so advised and will be a loss to the system (Block 49). An applicant with a history of drug usage will have an OFE score of at least 75 to be enlisted.

Physical Causes. At this stage of the applicant's processing, his physical condition is reviewed to discover conditions that will (1) disqualify him for service, or (2) require documentation in order for him to pass his physical examination for enlistment. If the recruiter screens the applicant and finds that he is obviously disqualified, he will so advise the applicant and the applicant will be lost to the service (Block 45). However, if the applicant exercises his rights to be examined at a recruiting medical facility to confirm or disconfirm his disqualifying characteristics (Block 50) enlistment processing will be suspended pending the outcome of the examination (Block 55).

Certain physical conditions are categorized as correctible disqualifications (Block 46). For example, the applicant cannot be enlisted if he is more than 10 lbs under- or overweight. If he will not attempt to correct this deficiency (Block 51), he will not qualify for enlistment and will be a loss. If he will attempt to correct it (Block 56), processing for enlistment will be suspended (Block 55) until the questionable condition is resolved.

In a large number of cases, there are obviously no personal causes for disqualification (Block 42), the OFE score is well in the acceptable range (Block 44), and the applicant is in good physical condition without any apparent disqualifications (Block 43). The flow for such individuals is called the "routine" flow--i.e., the flow without complications. Whatever the path, those who continue their enlistment processing arrive at Block 61. At this point, the applicant initiates required forms, provides additional information to the recruiter, and makes other arrangements for enlistment.

## Establishing Physical Qualifications for Enlistment

The next step in the applicant's enlistment processing is establishing his physical qualifications for enlistment (Figure 18). If he is enlisting for one of the Reserve programs, he may be examined by the Reserve medical facility nearest his home. All other prospective candidates go to the Armed Forces

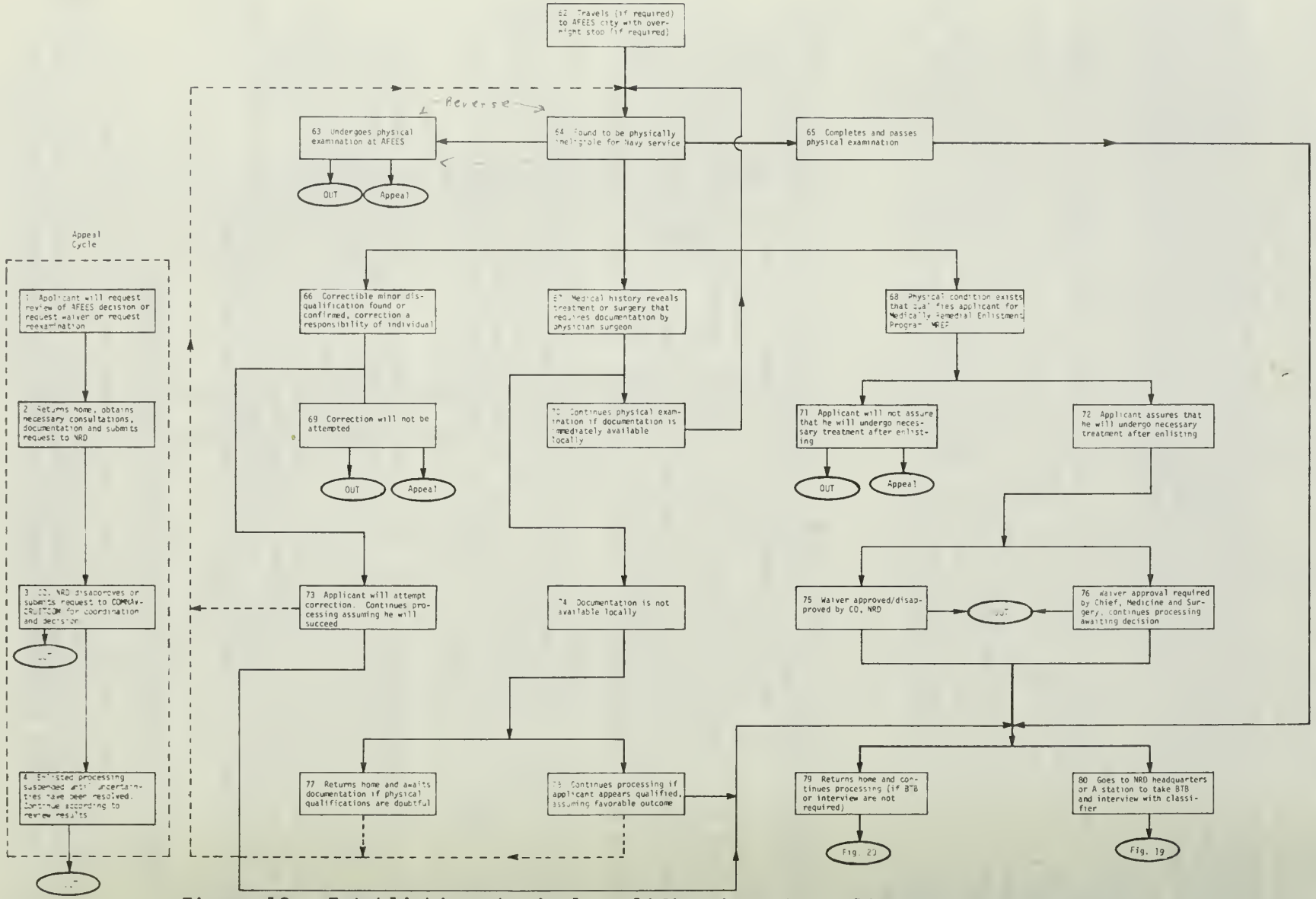



Figure 18. Establishing physical qualifications for enlistment of individuals who do not enter the direct-ship option. The dotted line indicates delayed

Examining and Entrance Station (AFEES) in their NRD to take the physical examination (Block 62). Some preparation is involved prior to undergoing the examination. For example, applicants who wear (or are supposed to wear) glasses are informed to take their glasses with them, those who wear contact lenses are told not to wear their contact lenses for a period of 72 hours prior to their physical examination and to take their glasses with them, and female applicants are warned that the AFEES will not examine them during their menstrual period. Additionally, there is a long checklist of conditions that might require documentation. Thus, if the recruiter is familiar with the checklist and the conditions described, the chances that the physical examination is completed without incident are greatly enhanced. If travel to the AFEES is required, the recruiter makes the necessary arrangements for bus tickets, meal tickets, and lodgings. Since the AFEESs conduct entrance physicals in the morning, the applicant must arrive the night before if he has any distance to travel. Some recruiters drive the applicant to the AFEES in the morning so he doesn't have to spend an additional day. All NRD and Class A stations with an AFEES have some arrangement whereby a representative of the appropriate, nearby, recruiting station meets incoming applicants and helps them with the local transportation, housing, and meal requirements.

The entire process can be extremely simple and incident-free, as shown by the routine flow. The applicant undergoes a physical examination (Block 63), completes and passes his physical examination (Block 65), and either returns home for further processing (Block 79) or goes to the classifier at NRD headquarters for BTB testing and interview (Block 80). On the other hand, he may be found ineligible for Navy service (Block 64), in which case he is a loss to the system. However, if the applicant decides to contest the decision, he has access to the appeal cycle, shown in Figure 18. In this case, he can request a review of the decision, which may go all the way up the channels of command to the Bureau of Medicine and Surgery; request a waiver for the disqualification, unless it is failing to meet a specific requirement for a rating or school, or request a reexamination. The commanding officer of the NRD may either disapprove the request, based on its overall merits, or forward it with recommendations and any relevant documentation that the applicant can provide. Enlisted processing will be suspended during the appeal cycle, and action will be taken according to the findings.

Other problems relating to the applicant's physical examination are not as clear-cut as the two cases mentioned previously. For example, he may have a correctible physical condition (Block 66). In this case, he may either refuse to attempt correction (Block 69) and be a loss to the system or agree to correct the problem (Block 73). Processing may continue, assuming that he will correct the deficiency.

Another problem area may be the existence of a medical history that includes treatment or surgery that requires documentation by the original physician/surgeon. In cases where a phone call can establish the fact that such documentation is available and will be forthcoming, the applicant reenters the process (Block 70). However, if the documentation is not locally available (Block 74), a decision must be made whether to send the individual home on "medical hold" because the eventual disposition of the case is uncertain (Block 77) or to continue processing while the individual is in "medical hold" assuming a favorable outcome (Block 78).

The Medically Remedial Enlistment Program (MREP) (Block 68) is a special program for the applicant with a medical problem. The individual must meet two conditions to be MREP eligible. First, he must be an applicant for an enlistment program generally covered under Blocks 27 and 28 in Figure 15 (other than the Philippine Recruiting Program or the Ready Mariner Program). Second, he must have only one remedial medical problem. If he meets these conditions, he must assure the Navy that he will undergo the necessary treatment after enlisting (Block 72). If he will not provide this assurance, he will be a loss to the system or he may enter the appeal cycle (Block 71). For the applicant who has given this assurance, the commanding officer of the NRD may grant a waiver for the physical disqualification (Block 75) if the condition is specifically listed in the enlisted recruiting manual and if the examining physician recommends enlistment under the MREP program. For physical conditions not listed in the enlisted recruiting manual, the waiver request must go through channels to the Bureau of Medicine and Surgery (Block 76). Although any approving authority has the power to disapprove the waiver, in all likelihood, an individual who has been recommended for the MREP program will continue processing (Blocks 79 and 80).

Verifying Program of Interest

The next step in the enlistment process,i.e., BTB testing and interview with the classifier (Figure 19) applies only to applicants for the special programs listed under Block 28 in Figure 15. Applicants for the School Guarantee program in Block 27 of Figure 15 must be interviewed by the classifier but may not be required to take the BTB if their eligibility for the program was based on qualifying ASVAB scores. However, if such eligibility was based on qualifying SBTB scores, the BTB must be taken. Since BTB results supersede SBTB results, the SBTB-qualified applicant may find that he is not qualified for Navy service; i.e., that he does not meet minimum mental requirements as measured by the BTB (Block 82). Even if the BTB results show that he is qualified mentally, he could still find himself not qualified for Naval service, since using BTB results rather than SBTB results could cause his OFE score to fall below 68, the minimum requirement.

An applicant for any other special program in Block 28 of Figure 15 may find, after taking the BTB, that he is unqualified for the program in which he is interested but still qualified for Navy service (Block 83). This situation could result if the applicant: (1) was tentatively qualified for the program on the basis of the SBTB results (Block 30 of Figure 15) and the BTB was required, (2) obtained ASVAB and SBTB scores that were too low for the program (Block 30 of Figure 15), but wanted to take the BTB to establish his qualifications (Block 40 of Figure 15) or (3) wanted, and appeared qualified (Block 34 of Figure 15) for one of the special programs and was required to take the BTB to establish his eligibility.

The other outcome of BTB testing is simply that the applicant qualifies, at least on the basis of testing, for his program of interest (Block 84). The classification interview (Block 85) that occurs next in applicant processing is due to the all-volunteer program. There was no need to provide classification services to the conscriptee before he entered service. The volunteer, however, wants to know what he is getting into, and the Navy, because of the differences in the relative attractiveness of the various Navy

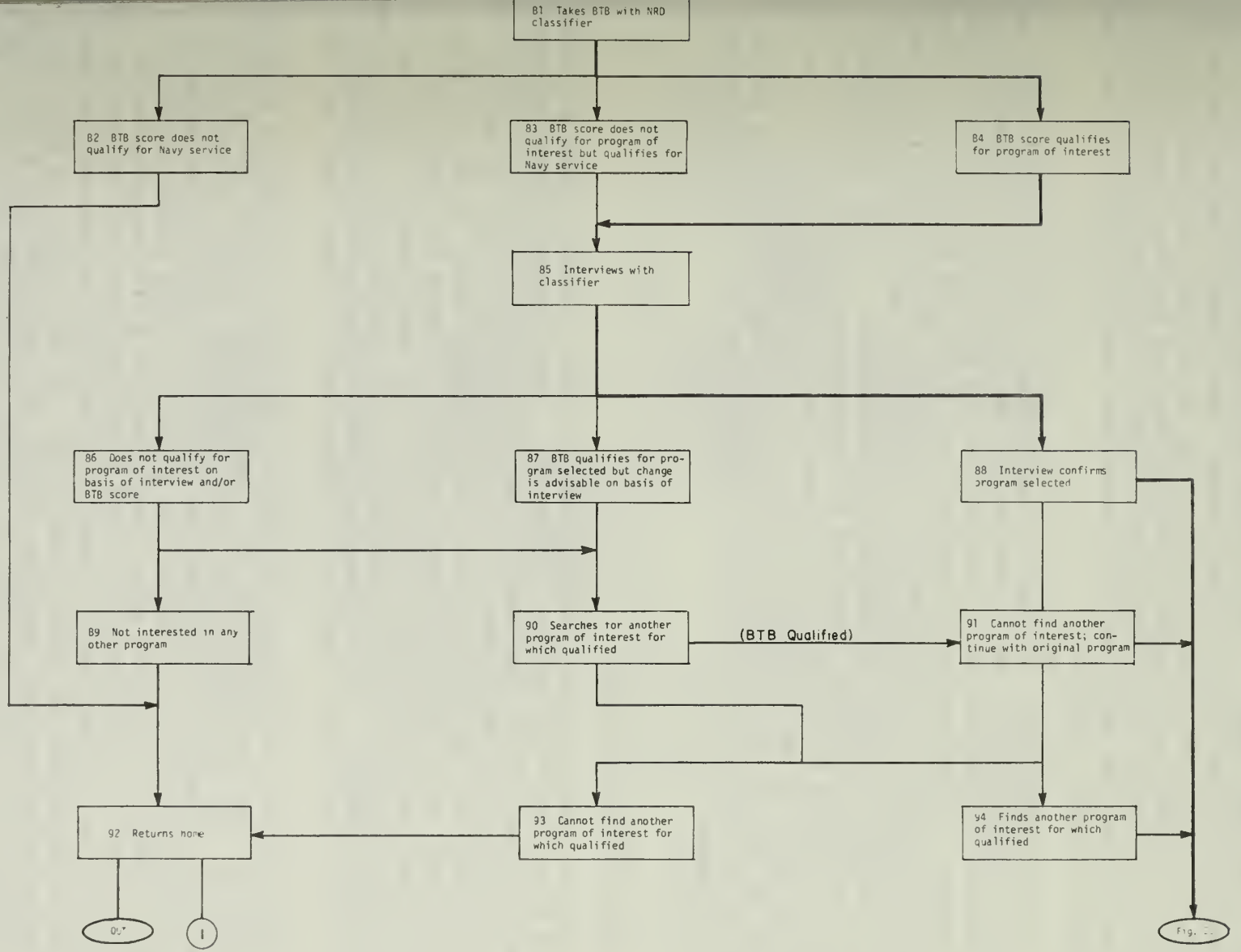



Figure 19. Verifying program of interest to individuals who do not enter the direct-ship option.

programs, must exercise control of the input at its source. Thus, the classifier has several duties. First he must evaluate the qualifications of the applicant on the basis of his school record, work history, and motivation as well as the pattern and level of test scores to eliminate the obviously disqualified. Second, as an expert in occupations and the Navy career structure, he must advise the applicant on the nature of the program and the skill required so that the applicant fully understands what he is getting into and can make a rational decision.

In the routine flow, as shown on the flowchart, the applicant takes and qualifies on the BTB, and the interview with the classifier confirms the appropriateness of the program of interest for the particular individual (Block 88). However, if the applicant does not qualify for his program of interest on the basis of his BTB score and/or the interview (Block 86), or if he does qualify on the BTB but a change appears advisable on the basis of the interview (Block 87), a change of program may be indicated. It he is not interested in any other program (Block 89) and returns home (Block 92), he is probably a loss to the system. If he seeks another program for which he is qualified and which may interest him (Block 90), and fails to find such a program, he may, if he is BTB qualified, continue with the original program (Block 91) or return home (Block 93). Hopefully, he will find another program of interest (Block 94).

## Establishing Entry Date

The next problem facing the applicant is that of establishing the date for his entry into Navy service (Figure 20). Since losses to the programmed, on-board strength of the Navy must be made up through recruiting (Figure 2), it is vital that the actual entry or flow of individuals into the Navy is finely controlled. Accordingly, the ideal situation would be for the Navy to have a pool of obligated personnel scheduled to enter the service at a rate that best serves the Navy's interests. This would result in a relatively steady flow that could be counted upon to minimize wide, cyclic trends in recruiting demands. To this end, the CACHE program exists in the Navy. The U. S. Air Forces have been able to approximate this model for some time.

With this as a background, the flow of individuals is taken up at Block 95, where the qualified applicant must now establish a date of entry into Navy service. He may desire either early entry into service (Block 96) or delayed entry through the CACHE program (Block 97). The CACHE program is particularly desirable, for example, to a senior in high school who would like a few months of vacation after graduation and a firm assurance of a job after that. If the program selected by an applicant does not require an OCCSPEC quota or a school seat allocation (Block 98), the process for establishing an entry date is greatly simplified. In this case, the applicant desiring early entry merely goes home (Block 111) and waits for a call from his recruiter. If he desires CACHE, he enlists in the USNR (Block 110) and can remain in the pool for up to 180 days. He does not have to take part in Ready Reserve training, but he builds up longevity for pay purposes during this period. As previously stated, he can recruit for the recruiter while in CACHE and can advance one pay grade if he provides three leads who enlist. Having enlisted in the USNR, the applicant returns home (Block 111) and awaits his date of entry into Navy service.

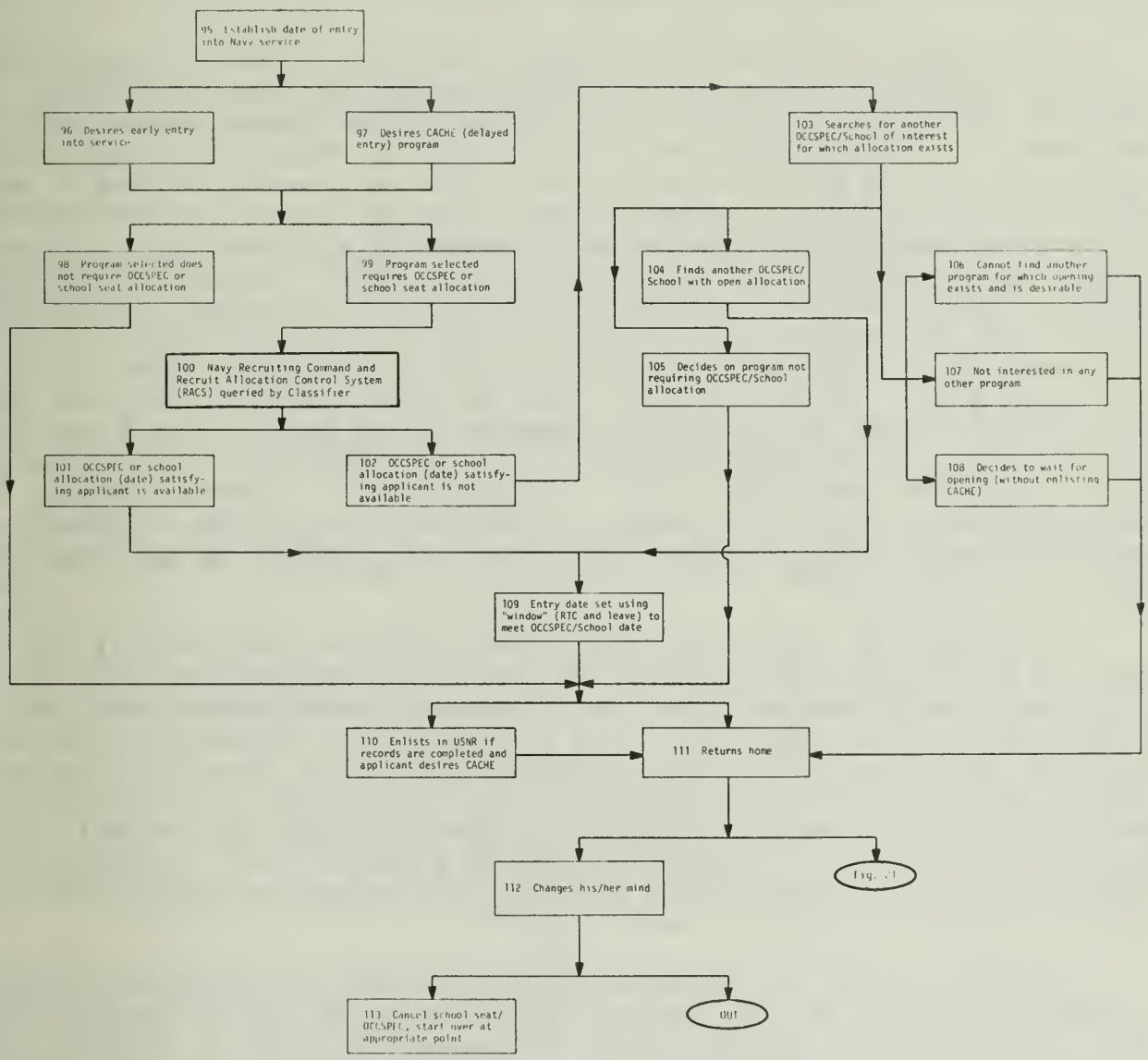



Figure 20. Establishing entry date of individuals who do not enter the direct-ship option.

While the flowchart shows that steps in establishing an entry date are conducted by the classifier at the NRD headquarters or the Class A Station, the may be conducted by the recruiter after the individual has returned home. This is particularly true for individuals enlisting in programs listed in Block 26 of Figure 15. The applicant enlisting in the USNR, however, must make his oath of office before a commissioned officer.

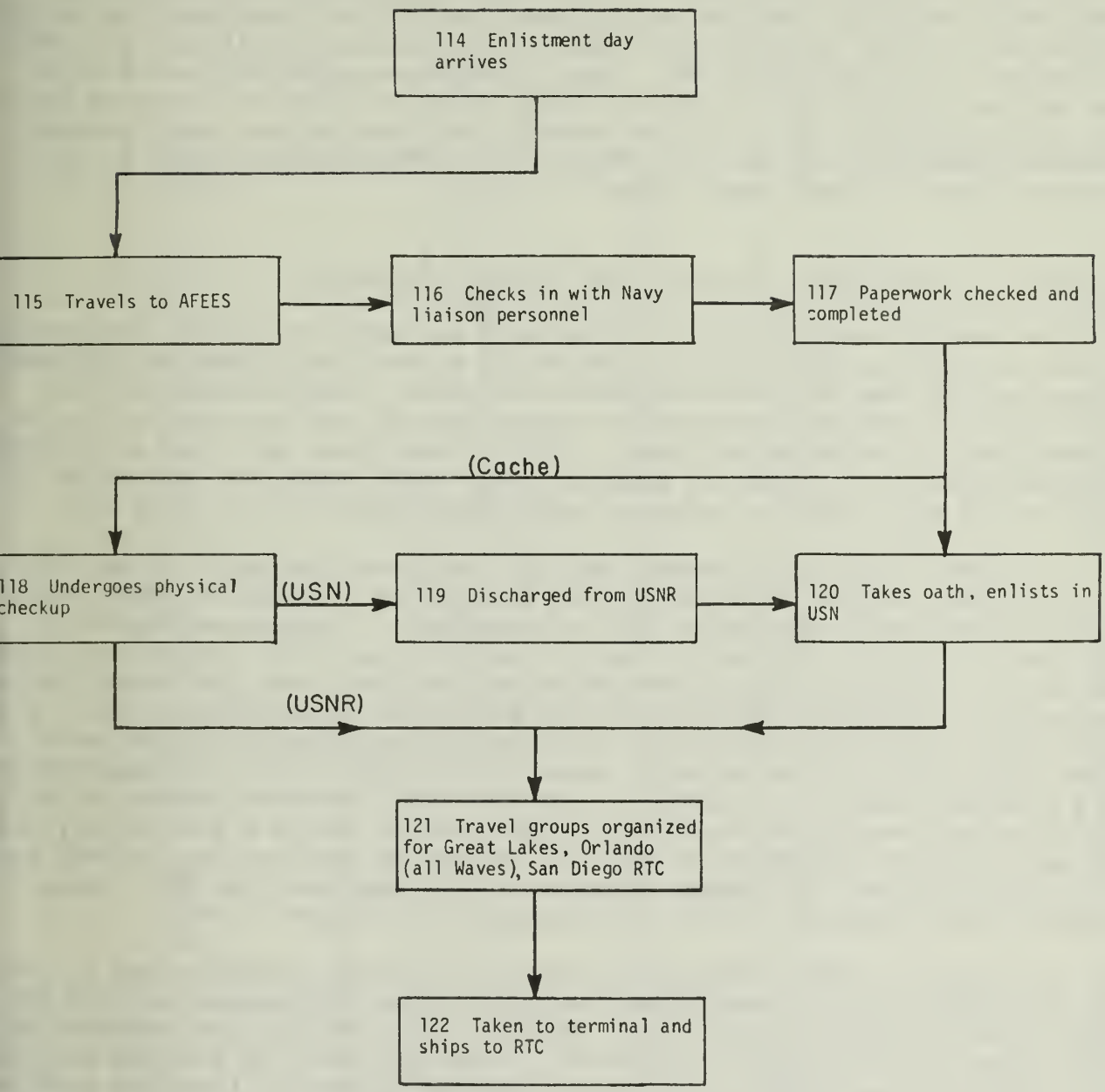
If the program selected (from Blocks 27 and 28 of Figure 15) requires an OCCSPEC or school seat allocation, the procedure becomes more complicated. The classifier must contact the Recruit Allocation Control System (RACS) Branch in Headquarters, Navy Recruiting Control (Block 100) to determine the availability of an opening in the desired time vicinity of the applicant. If there is an opening that satisfies the applicant (Block 101), RACS makes a reservation for the individual and assigns an entry date in terms of a window--i.e., "not earlier than" and "not later than" certain dates (Block 109). Generally, the limitations of the window are determined by noting the convening date of the school involved, and then backing up the number of days required for recruit training for 2 weeks of leave following recruit training, plus a 5-day window for the recruiter and AFEES. At the time this survey was made, the calculation was based on a "not later than" 84 days before convening of the school, plus 5 days for the recruiter. The applicant then enlists in the USNR (Block 110), if appropriate and returns home (Block 111). If the enlistee is entering programs in Block 27 of Figure 15, he may remain in CACHE for up to 270 days. If he is entering programs in Block 28 (other than direct procurement), he may remain in CACHE up to 1 year.

If an OCCSPEC or school seat opening that suits the individual is not available (Block 102), he may search for another program that interests him and for which an allocation might exist (Block 103). The problem is solved if he finds an alternate route (Block 104) or decides on a program that does not require an OCCSPEC or school seat allocation (Block 105). However, if he cannot find another program (Block 106), is just not interested in any other program (Block 107), or decides to wait for an opening (Block 108), he will return home (Block 111). The latter is actually a case of "wait listing" with the recruiter for a sudden opening that may arise because of cancellations or disqualifications (such as in "medical holds").

Finally, if, after all of these preparatory steps, an individual changes his mind (Block 112), he will lose his OCCSPEC or school seat allocation (Block 113), if he had one, and start over at the appropriate place in the flow if he is still interested in Navy enlisted programs. Otherwise, he will be a loss to the system.

## Entry into Navy Service

Finally, the day that the enlistee actually begins active service arrives (Figure 21), either because of a phone call from the recruiter (for those who had no set date of entry) or because of a predetermined date for entry. On that day (Block 114), the enlistee travels to the AFEES designated as his entry point (Block 115)--usually the nearest AFEES. In most cases, he will travel to AFEES by automobile with his family and/or close friends, who will be seeing him off. Otherwise he may be driven or be furnished bus tickets to the AFEES by his re-




ure 21. Entry into Navy service of individuals who do not enter the direct- option.

cruiter. At the AFEES, he checks in with the Navy liaison personnel (Block 116), who review his dosier for correctness and completeness (Block 117). If he has been in CACHE, he will undergo a physical checkup (Block 118) to update his original physical examination. If he has been formally enlisted in the USNR and is entering a Regular Navy program, he will be discharged from the USN (Block 119). If he is entering a Regular Navy program, he will take the oath and enlist in the USN (Block 120). Next, groups are organized for travel to the various recruit training centers--Great Lakes, Orlando (all women go here), and San Diego (Block 121). The new recruits are taken to the local terminal from which they ship to their RTC (Block 122) and, for most of them, to the greatest change in their young lives.

## Flowpaths of Individuals Who Enter the Direct-Ship Option

The common characteristic of individuals who enter the direct-ship option (Blocks 26-29-38 or 27-30-32-38 in Figure 15) is that their ASVAB or SBTB test scores qualify them for their programs of interest. Administratively, this means that all qualifying procedures, except the physical examination, can be accomplished at the recruiter level. This includes those who enter an OCCSPEC program (Block 27 of Figure 15) based on their ASVAB scores and require an allocation for entry into the program through RACS (Block 100 of Figure 20).

The flow in Figure 22 assumes that the individual has mentally qualified for enlistment and has successfully gone through the reservation system shown in Figure 20 (Blocks 99-100-101-109), if necessary. The dominant hurdle in the flow is the time required to explore possible causes for disqualifications (Block 1). This is because documentation must be final, and the acquisition of the critical documents--birth certificate and police checks--might require time Accordingly, while the direct-ship route implies rapid processing and early entry into service, it may actually require considerable time if documentation is a problem. Even so, it is safe to say that the direct-ship option is for the individual who desires early entry into service. It is a particularly useful option for the recruiter, because he can put the applicant in his "hip pocket" and pull him out at a moment's notice to fill quotas at the last minute. In a way, the category provides the recruiter with his own "cache."

As Figure 22 shows, the applicant merely waits for a notification to ship (Block 2) while his completed papers are sent to the NRD headquarters and the Navy liaison personnel at the AFEES. When he is notified by the recruiter to ship (Block 3), he travels to the AFEES (Block 4), checks in with the Navy liaison (Block 5), undergoes a physical examination (Block 6), takes the oath of office and enlists (Block 7), and ships to his RTC (Block 8). This is probably the stereotype that the average person has of the recruiting process. Obviously the applicant must be in good physical condition and have a very negligible probability of failing or facing difficulties in passing his physical examination. If all of recruiting fitted this simple stereotype, it would be a relatively simple matter. However, the flows in Figures 14 through 21 certainly show that this is not the case.

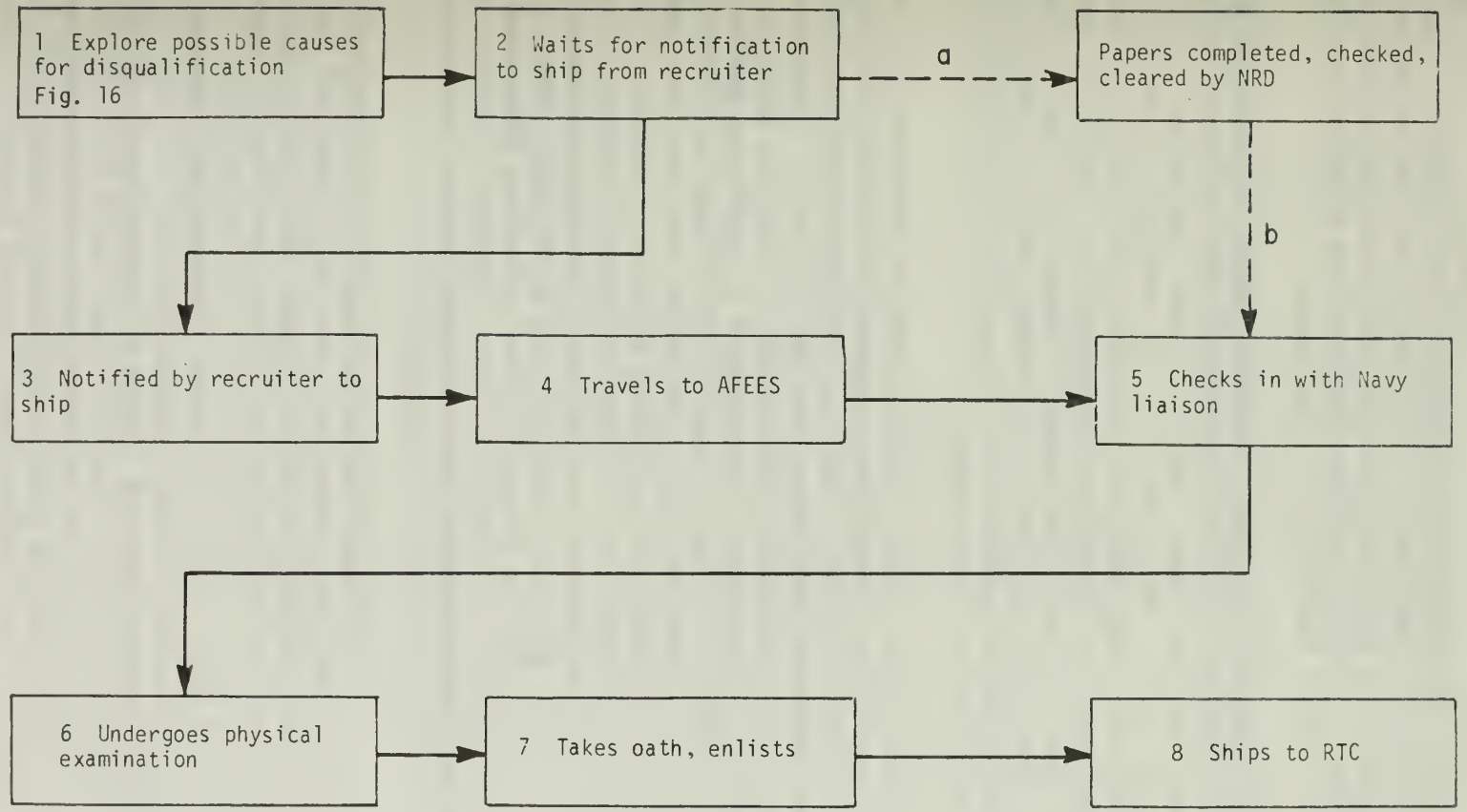



Figure 22. Abbreviated flow of direct-ship enlistees.

## QUANTITATIVE ASPECTS OF THE FLOWPATHS

This portion of the study presents some statistics that will show the trends and actual numbers of QMAs who are involved at various nodes and stages of the flow. Although these statistics do not provide an analytical examinatio of the recruiting effort, they do indicate the relative difficulty of the recruiter's task in recruiting for broad program areas.

The new QMAs were shown in Figure 9 as either being high-school enrollees or dropouts, and the importance of this distinction was mentioned more than onc in the narrative examining the flows. Table 4 shows the percent of high-schoo dropouts in 1972 by age group, race, and sex. As indicated by the table, less than 10 percent of the 16-17 age group are dropouts, which reflects the fact that most states make education compulsory up to age 16. The 16-17 age group includes students in the 11th and 12th grades. However, in Table 5, which presents the retention rates (the complement of dropout rate) at various grade or step levels over a period of several years shows that the dropout rate increases rapidly at the 11th and 12th grades.

Nonetheless Table 4, which shows dropout rates in different age groups at one point in time, suggest that the dropout rate is decreasing, except for black males. These data,and other sources, indicate that the difference in dropout rates between men and women is also decreasing and, in fact, is becoming more nearly equal. In the past, the retention rate was higher for females. The most obvious conclusion to be reached from Table 4 is the large difference in dropout rates between whites and blacks, especially between male whites and blacks. The recruiting doctrine has been to maintain the same personnel standards in recruiting minorities as in recruiting majority personnel. Since NAVCRUITCOM's planning objective for FY 74 was 90 percent high-school graduates, it was twice as difficult for a recruiter to recruit a black, based only on Table 4 trends. Also, some programs require women to be high-school graduates, while men are not so required. In the past, this would have been more equitable when women high-school graduates exceeded the men. However, current trends, where the ratios are more nearly equal, would suggest that a higher standard is being applied to women for entering these programs.

The magnitude of the recruiting problem can be seen by using some very gros calculations. It appears that the graduating class of high-school seniors is approximately three million students. Half of them--1.5 million--are men. Of this total, slightly more than half go on to college, leaving 750 thousand of the original graduating class. Some of these will not be physically qualified for service. Others will have disqualifications of a personal nature due to a multitude of causes (discussed in the previous section). The FY 74 Marketing Plan of NAVCRUITCOM shows a planning figure of approximately 85,000 new accessions for the year, of which the idealized goal would be 90 percent high-school graduates, or 76,500 first-term enlistees who are high-school graduates. If all of these had to come from the current high-school graduating class, the Navy, alone, would need to recruit better than 1 out of every 10 of the 750,000.

Since one high-school graduating class is too narrow to use as a basis for manpower planning, the pool of QMAs is expanded to include those from 17 to 21 years of age. Males in this group number approximately 4.5 million. If various

Table 4

Percent of High-School Dropouts in 1972 By Age Group, Race and Sex

| Age Group | Negro | | White | |
|---|---|---|---|---|
| | Male | Female | Male | Female |
| 16-17 | 9.4 | 7.6 | 7.8 | 9.8 |
| 18-19 | 27.1 | 21.0 | 13.5 | 13.2 |
| 20-24 | 27.2 | 27.3 | 15.3 | 16.6 |

te: Based on Table 66, Digest of Educational Statistics, 1973 Edition. (Grant
l Lind, 1974).

Table 5

Retention in Schools

| Year | Grade or Step | Percent[a] Retained | Calculated[b] Numbers (Thousands) | Actual[c] Number (Thousands) |
|---|---|---|---|---|
| 1964 | 5 | 100.0 | 3,465 | 3,465 |
| 1970 | 11 | 86.5 | 2,997 | 3,261 |
| 1971 | 12 | 79.1 | 2,741 | 3,005 |
| 1972 | High-school graduate | 75.0 | 2,599 | 3,015[d] |
| 1972 | Entering freshmen | 43.0 | 1,490 | 1,740[d] |
| 1976 | Bachelor's degrees | 23.0(est.) | 797 | 876[d] |

e: Based on data from Digest of Education Statistics, 1973 Edition, (Grant
Lind, 1974).

om Figure 2 and Table 13, both males and females.

lculated numbers based on percent retained of 1964,
h-grade enrollment.

sed on Tables 30, 65, and 82.

71-2 school-year graduates (Table 65) and bachelor's degrees (Table 111).

72 entering freshmen from Table 91.

criteria, such as the percentage of high-school graduates desired and a specific range in mental qualifications, are applied, the pool from which new accessions (first-term enlistments) must originate is reduced to approximately 1.6 million men. Since the estimated number of new accessions for the services for FY 74 was 470 thousand in mental groups I to II, recruiters had to recruit 1 out of every 4 males in the group. The Navy goal for personnel in this category was approximately 85 thousand, making it necessary for the Navy to recruit 1 out of every 19 young men among the 1.6 million. It should be realized, however, that these rates depend heavily on the method used to arrive at the original population of QMA in the age group from 17 to 21, and the factors applied to reduce it to 1.6 million as the recruiting pool. The methods for estimating these populations are constantly undergoing study and revision.

Attention will now turn to the individual in a 4-year college or university as depicted in Figures 10 and 11. The various officer programs in these years of an individual's career include the student programs, officer candidate programs, and a limited number of direct-appointment programs in the Medical Service Corps, limited duty line, and engineering fields. Table 5 showed that 43 percent of the original cohort of 1964 students (57 percent of the high-school graduates) entered college and only 53 percent (23 percent of the 1964 cohort) of those who entered completed college and attained the baccalaureate degree. Of the age group found in a 4-year college, approximately one-third is enrolled in an institution of higher learning. Another estimate of the retention of students as they proceed through college is shown in Table 6, which is based on rates provided by the Research Division of NAVCRUITCOM headquarters. It is assumed that 58 percent of high-school graduates enter college, which is essentially no different from the rate given in Table 5. The output end (graduates) also corresponds within 1 percentage point to the rate in Table 5. Using the estimated enrollment of new male students in 1973, Table 6 generates the number of males that would be expected in succeeding grades in succeeding years based on the given retention rates.

Table 7 shows the short-range, officer-procurement goals that were used for planning purposes in early FY 74 by NAVCRUITCOM. Comparing the requirements with the number of students in the various grades of a 4-year course of instruction, it is very obvious that simply the number of officers required cannot be a problem, since the ratio of requirements to the supply of students is so small. For example, the NUPOC program with high priority must procure 225 candidates from the junior and senior years, or over one million students (from Table 6). This is an oversimplification, of course, since many of the students will be in other student procurement programs (such as ROTC) and a significant number will have completed a period of military service (as indicated in the flowpaths). The example is given for the sole purpose of showing that the recruiting problem is completely different from that involving enlisted programs.

The discussion will now focus on the individuals who entered graduate school or a professional school requiring an advanced degree. The flowpaths were depicted in Figures 12 and 13. There were scholarship and nonscholarship programs in several graduate and professional fields, and programs for the direct appointment of specialists in these fields in the USNR with active or inactive service and in the Regular Navy with active service. The fields of primary interest are law, theology, engineering, and the medical and allied fields. Table 8 presents the number of degrees given in some of these areas in the 1970-71

Table 6

Retention in College (Males)

| Year | Class | Percent Retained[a] | Calculated Numbers[b] (Thousands) |
|---|---|---|---|
| 1973 | Freshman | 100.00 | 946 |
| 1974 | Sophomore | 76.5 | 724 |
| 1975 | Junior | 63.6 | 602 |
| 1976 | Senior | 56.3 | 533 |
| 1977 | Graduate | 54.0 | 510 |

[a]Based on NAVCRUITCOM-provided rates.

[b]Estimated 1973 entering freshmen from Table 91, Digest of Educational Statistics, 1973 Edition.

Table 7

Short-Range Officer Program Goals of the Navy in FY 74

| Programs | Subtotals | Totals |
|---|---|---|
| OCS (Men) | | 490 |
| Nuclear Power (NUPOC) | 225 | |
| Nuclear Power Instructor | 82 | |
| Supply Officer | 79 | |
| Civil Engineers | 49 | |
| Restricted Line Designators | 55 | |
| OCS (Women) | | 200 |
| NROTC | | 1250 |
| ROC | | 260 |
| AVIATION | | 2074 |
| AOC | 902 | |
| NFOC | 640 | |
| NAOC-AI | 32 | |
| AVROC (juniors) | 500 | |
| TOTAL (All programs) | | 4274 |

Note: From Exhibit II-3, NAVCRUITCOM Marketing Plan for FY 74.

school year. To make the picture complete, bachelor's degrees are also shown in the fields where direct appointment programs are in effect for those with the baccalaureate degree. In reading the table, it should be noted that, while 191 master's degrees in clinical psychology are shown, most of these are not terminal master's degrees, since approved programs in the field are only for the Ph.D. degree. In the case of nursing degrees, those shown are in 4-year academic institutions, whereas other sources of nurses exist in approved hospital programs. The many fields corresponding to the allied sciences section of the Medical Service Corps are not shown in the table, since the large enrollment in most of these fields greatly exceeds the relatively small numbers needed in Navy medicine.

Table 9 shows the short-range, officer-procurement goals that were used for planning purposes in FY 74 by NAVCRUITCOM for these specialty fields. Here, it is evident that the Navy's needs for officers in medicine and osteopathy are critical, since the ratio of needs to graduates is large. While the figures are not directly relatable, since they are for different years, it would appear that the Navy would have to obtain 1 in every 8 graduates, if it had to fulfill its direct-appointment goals from the current graduating class. Similarly the Dental Corps would have to procure 1 in every 20 graduates for its direct-appointment program. Both of these ratios are underestimated to the extent tha a considerable number of those receiving the degrees shown in Table 8 have already taken part in student programs that obligate them to service in the Navy. On the other hand, the Nurse Corps recruiter has a very serious problem in the handling of nursing student programs that are so desirable and yet so few in number relative to the number of students desiring them. The other programs in Table 9 are not notable from a strictly numerical standpoint.

Table 8

Number of Higher Degrees in Officer Procurement Areas
(1970-1971)

| Field | Bachelor's | Master's | Doctorate (Professional) |
|---|---|---|---|
| Law | | | 17,421 |
| Theology | | | 5,055 |
| Engineering | 50,357 | 16,457 | 3,638 |
| (Medical) | | | |
| Clinical psychology | | 191 | 133 |
| Optometry | | | 531 |
| Podiatry | | | 240 |
| Dentistry | | | 3,745 |
| Medicine | | | 8,919 |
| Osteopathy | | | 472 |
| Hosp./health care admin. | 60 | 496 | 14 |
| Occupational therapy | 633 | 51 | |
| Pharmacy | 4,549 | 194 | 94 |
| Physical therapy | 1,252 | 73 | |
| Nursing | 12,199 | 1,530 | 7 |

Note: Based on Tables 112, 113, and 115 of Digest of Educational Statistics, 1973 Edition.

Table 9

Short-Range Officer Procurement Goals in Specialist Fields Of The Navy in FY 74

| Programs | Subtotal | Totals |
|---|---|---|
| Medical Officer | | 2991 |
| Medical Corps | 1704[a] | |
| Scholarship program | 547 | |
| Direct appointment/Other | 1190 | |
| Dental Corps | 420 | |
| Scholarship | 240 | |
| Direct appointment | 180 | |
| Nurse Corps | 650[a] | |
| Scholarship | 440 | |
| Direct appointment | 260 | |
| Medical Service Corps | 217 | |
| Judge Advocate General | | 130 |
| Student | 100 | |
| ROC/NROTC students | 30 | |
| Theology | | No quota |
| Total, All programs | | 3121 |

Note: From Exhibit II-3, NAVCRUITCOM Marketing Plan for FY 74.

[a]The scholarship and direct-appointment subtotals do not add up to the Medical Corps and Nurse Corps subtotals in the source.

## erview

This section of the study examines the recruiting process at a level in ich NAVCRUITCOM becomes the system and its operations and integrated ac- vities are subsystems within the system. Simply put, the section shows ow" recruiting is accomplished. It will also examine in more detail how e system interacts with other systems of the Navy--primarily the person- l/manpower system as the customer and monitor of Navy recruiting and the aining system as the first consumer of the system. Figure 23 considers e organization with the following generic elements or subsystems: (1) sys- m inputs, (2) support and maintenance, (3) information and control, (4) oduction or throughput and (5) system output, which is manpower for the vy. The figure of merit is the ratio of effectiveness to expenditures ighted for the opportunity potential at the source. In its simplest form, ch a model could be stated in terms of the number of recruiters and dollars t into the system and the number of recruits-per-recruiter and the cost- r-recruit at the output end of the system. A model of this type provides e best insights into problem solving within the system and, possibly for is reason, is the model that decision makers use to evaluate, plan, and bud- t for recruiting in the military services.

## puts to the System

As shown in Figure 23, the inputs to NAVCRUITCOM that enable it to exist d function are personnel, money, and materiel. The sources are BUPERS and e Navy in the field. The inputs of primary interest to this study are the ficer and enlisted recruiters. The inputs of secondary interest are those at directly affect the functioning of the officer and enlisted recruiters.

### Officer Input to NAVCRUITCOM Field Activities

At one time, Navy officers who were assigned to recruiting typically were ose who were not needed elsewhere or who were putting in time prior to re- rement. However, with the advent of the AVF, selectivity of personnel input to recruiting became a matter of critical importance. The job of a recruit- g officer was pictured as one of the most challenging in the Navy. It was scribed as requiring imagination and creativity, hours of very hard work and fort, and the toughness to face an endless string of frustrating situations, d providing the joys and personal rewards and satisfactions that could re- lt from a job well done. In Z-Gram 109, the then Chief of Naval Operations, miral Zumwalt, identified recruiting as the highest priority in the Navy d stated that there was no job in the Navy that was more important or that uld contribute more towards the future effectiveness of the Navy than a re- uiting assignment. He stated that he considered it of such importance that had directed selection boards and detailers to give fullest consideration d weight to this important assignment when deliberating on assignment and omotion matters. A subsequent issue of the BUPERS Officer's Newsletter ated that recruiting was the best tour in the Navy and would continue to

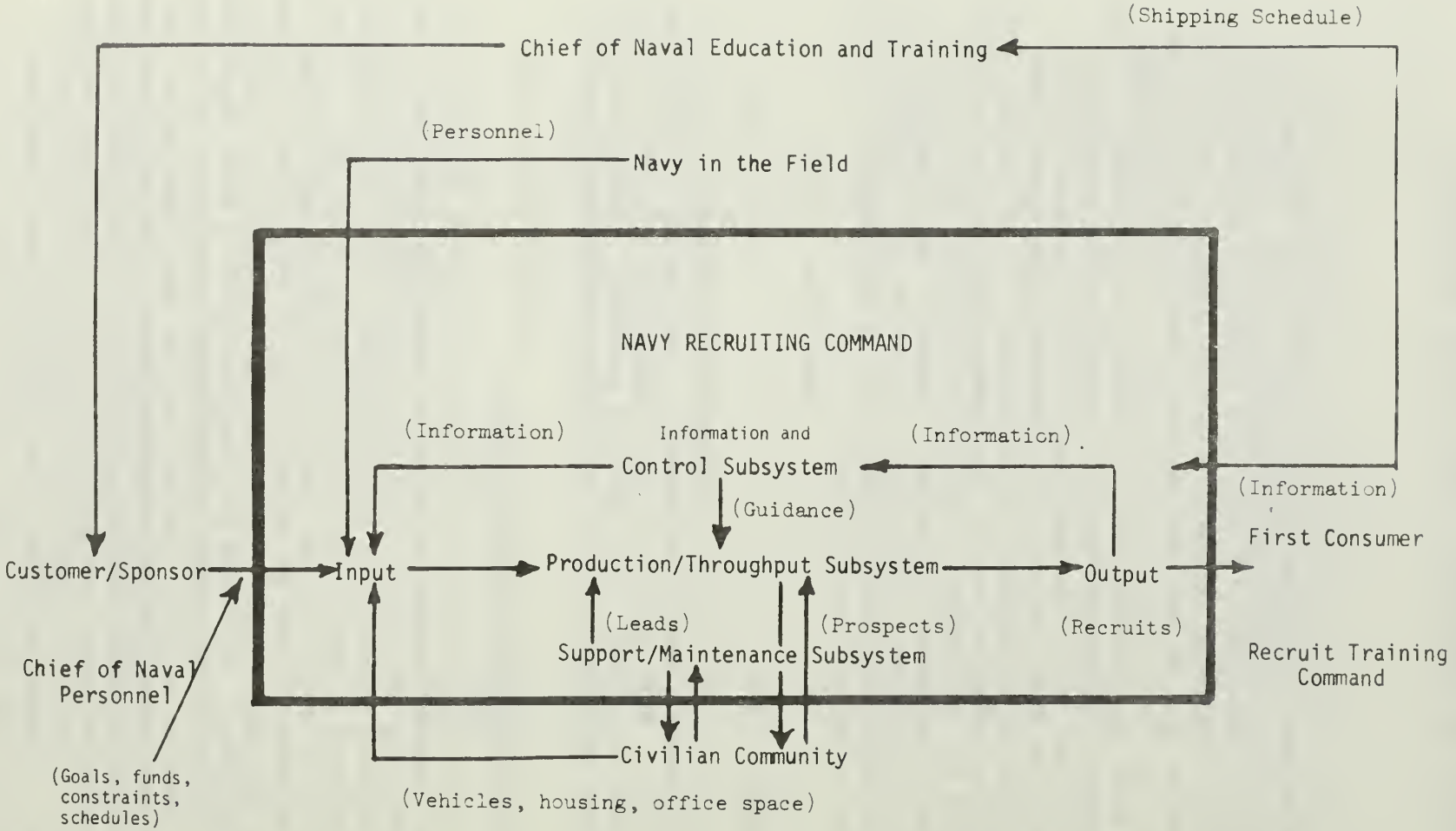



Figure 23. Flow diagram of the Navy Recruiting Command as a system.

er the Navy officer "...a true challenge in management, leadership, per-
al growth and public relations. If you desire and can meet this challenge,
icate recruiting duty on your Officer Preference Card and Personal Infor-
ion Card." The actual assignment of obviously very capable officers to
ruiting assignments and their subsequent selection for promotions, even to
g rank, solidified the image being promulgated and greatly increased the
ue of a recruiting assignment for shore duty.

The record of every officer nominated for recruiting duty by the detailers
BUPERS is personally reviewed by the Deputy Commander or Commander, NAVCRUIT-
, before he is selected and sent to the Recruiting Officer Management Orient-
on (ROMO) course at Pensacola, Florida. In addition to providing orientation,
s course serves to screen out the obviously unfit officer in two ways.
st, it gives an officer the opportunity for self-selection; that is, he may
to be relieved from the recruiting assignment if he feels, after taking
course, that it is not appropriate for him. Second, the 16 Personality
tors (16PF) test, which was published by the (Institute for Personality and
lity Testing) (IPAT) in Champaign, Illinois, is given to officers after their
ection and arrival at ROMO. Although the 16PF test program was designed
marily as a selection device for enlisted recruiters, it is used by ROMO of-
ials, along with other factors, in assessing the probability that the officer
l successfully complete the course and become a competent officer in a re-
iting assignment. The other factors are daily reports and discussions among
staff about each student, his academic progress, and his behavior at three
ial events.

The selection of new officers for recruiting assignments is typical of many
sonnel decisions in the Navy and in Navy recruiting; that is, it is based
ost entirely on interviews and personal assessments without specific criter-
or performance objectives. The unreliability of most interviews and sub-
tive assessments and their common lack of ability to demonstrate valid selec-
n against testable criteria have been amply demonstrated time and again
ier, 1973). A frequent finding with respect to selection and personnel assess-
t procedures based on individual opinion and judgment is that the person selec-
resembles the interviewer or evaluator. This appears to be true in the selec-
n and assessment of officers for NAVCRUITCOM. As revealed in interviews,
officer should be a self-starter, have leadership ability, be well-spoken
well-written, and demonstrate a combination of past success as a Naval of-
er and the apparent willingness to accept the orientation of Navy recruiting-
at of a professional salesman. The ultimate criterion for graduating an of-
er in the ROMO course is: whether he will be a worthy representative of the
. Navy. Only two officers failed to meet this criterion and had been rejected
recruiting in the 3 years that ROMO had been in operation as of the time of
s study. Thus, the selection process and training are said to fulfill the
uirements of NAVCRUITCOM. The end result is a group of officers who seem to
re common goals and are compatible in their recruiting assignments. There
no prerequisites or requirements that an officer have experience and/or for-
training in such areas as personnel, counseling, or industrial psychology,
would be required for recruiter positions in most civilian organizations.
only specialists in the group are those involved in recruiting for medical
grams. The reasons for this lack of specialization in the area of personnel
, for that matter, marketing and sales management, will become more evident
he material that follows.

In discussing the ROMO objectives and curriculum, the first item is the overall orientation of the course. The course is very general and, with two exceptions, shallowly covers a wide variety of subjects. Although attempts have been made to increase the specificity of the instruction to make it apply directly to the programmed assignment of the student, the general approach has prevailed. Thus, every student is given the same material that will make him a "recruiter." There is one area of specialized instruction, however, for those who are going to be commanding officers and executive officers, officers in charge of A Stations, and administrative officers. These individuals take additional hours at night in the area of field administration (discussed below), while the other officers are encouraged to spend their evening hours reading assignments in basic recruiting documents and manuals.

Approximately half of the ROMO students are line officers from surface and aviation areas, some 10 percent are from other active-duty officer categories, about 6 percent are warrant officers, and the rest come from the inactive Reserve. There were 99 students (60 Regular Navy and 39 reservists) in the first quarter of FY 1974, and 47 students, in the second quarter.

The 3-week course is broken down into the six areas or sections shown in Table 10. The introduction and orientation area covers inprocessing and an orientation to Navy recruiting in general, and includes 720 minutes for the "Gavel Club," a practicum in public speaking normally conducted during the lunch break. The recruiting programs area covers the various enlisted and officer programs and special recruiting programs and includes one session devoted to general information and professional ethics for most students. Those receiving specialized instruction in this area take night classes devoted to command and control in Navy recruiting, the subject of recruiting for "One Navy" (the reserves), and special administrative and logistic matters. The screening and processing area scans qualifications, applicant counseling, procedures and forms, school visits, etc., and includes five class sessions (the largest block) devoted to interviewing. The sales motivation and marketing area covers such topics as marketing, community relations, and advertising, and includes 890 minutes devoted to selling techniques and 360 minutes, to public speaking. The topic of selling techniques is devoted almost exclusively to personal salesmanship--one-on-one and one-to-a-group or audience. Finally, the miscellaneous area is reserved for questions and review, guest speakers, and other matters.

From the above, it can be seen that 1970 minutes, or 36 percent of the total scheduled time, is devoted to public speaking, selling techniques, and the gavel club. If the 225 minutes devoted to interviewing are added, 2195 minutes, or 40 percent of the scheduled time, is devoted to the development and practice of relating to others in a sales setting. While the topics and minutes devoted to them as shown here are subject to change, the large block of time devoted to salesmanship speaks for itself with respect to the purpose of the course and the orientation of Navy recruiting. This emphasis does not change. Salesmanship is the perceived and professed role of those in Navy recruiting, and the entire third week of the ROMO course is almost exclusively allocated to achieving this end objective.

Table 10

Recruiting Officer Management
Orientation Curriculum

| Area | Minutes of Instruction |
|---|---|
| Introduction and orientation | 1050 |
| Recruiting programs | 1100 |
| Administration | 125 |
| Screening and processing | 475 |
| Sales motivation and marketing | 2135 |
| Miscellaneous | 550 |
| Total: | 5435 |

## Enlisted Input to NAVCRUITCOM

The enlisted input to NAVCRUITCOM that will be examined here is that for recruiters--more precisely, canvassers. A canvasser in NAVCRUITCOM is an enlisted man directly involved in searching out and acquiring new enlistees and reenlistments for the Navy. When the term, recruiter, is used here, it will mean canvasser. As mentioned previously, there are well over 3500 recruiters among the nearly 6,000 persons making up NAVCRUITCOM. They are distributed throughout the country and overseas in over 1300 recruiting stations. Thus, the enlisted recruiter or canvasser is the largest tangible input to NAVCRUITCOM. Depending on how one costs the annual services of one recruiter, the amount spent on recruiters, however, is approximately half of that spent annually on advertising. In addition to the active-duty recruiter programs of the Regular Navy, there are special programs in which new enlistees are given extended leave at home after RTC to help recruite in their hometown areas, and Reserve recruiter programs, such as the TEMAC program, involving over 600 fulltime individuals.

As with officer input, there are no specific criteria or prerequisites for recruiter selection. New recruiters are obtained through volunteers and by asking those scheduled for reassignment to consider a recruiting assignment. Thus, recruiters have ratings that represent the gamut of Navy classifications. More recently, the career counselor field was created, with one of the specialty assignments being recruiting. This was the beginning of a career recruiter program such as the one that the U.S. Air Force has had for some time. There was no rush among the senior enlisted recruiters with specialty ratings to change to the counselor rating, however.

The actual selection procedure involves, first, a screening of the indivual's record jacket at his organization and, second, a mandatory interview with his commanding officer with a formal report of interview. What was said about interviews previously is even more appropriate here, since most commanding officers have very little knowledge of the detailed job requirements of a recruiter and the characteristics that make a productive recruiter. Each candidate for a recruiting assignment is administered the 16PF test prior to his selection. His test performance is scored at the ROMO school and interpreted according to a profile that was provided by the Institute for Personality and Ability Testing (IPAT). (When it was learned how simple the scoring and profiling was, the ROMO administration decided to conduct the testing program itself.) Test materials are purchased by the school from IPAT in Champaign,Illinois, and distributed through the ROMO school. Tests are hand-scored and profiled, and the results are stored in the computer facility of the Naval Air Station, Pensacola. A bank of over 8000 profiles is now on record.

Development of the selection profile was based on a study conducted in 1972 by IPAT. The 16PF was administered to 400 recruiters, and results were used to predict the commanding officer's overall rating of the individual's performance as a recruiter. A linear equation utilizing six predictor variables was able to account for some 12 percent of the variance in the ratings. After it had been demonstrated that this equation would hold up when applied to an independent sample, the 16PF test was adopted by NAVCRUITCOM. Considering the important function of the 16PF test at NAVCRUITCOM, it would seem that one successful application provided very scanty evidence of its validity. First, the reliability of the ratings was, no doubt, low. Second, since the policy

used by the raters in making their judgments is not known, what the test is actually predicting is not known. Third, the efficiency of the prediction is very low. Moreover, the prediction equation has not been validated as a selection device. Traditionally, with as low an index as was obtained in the study, the number of false positives and false negatives would completely negate the utility of the device for selection purposes. While the handbook for the 16PF (Cattell, Eber, and Tatsuoka, 1970) reports two equations predicting sales performance, neither has been validated as a selection tool. Thus, there is no evidence that the 16PF has any efficiency in the selection of sales persons or recruiters.

The selected candidate destined for a particular opening first attends the Enlisted Navy Recruiter Orientation (ENRO) course in leased facilities at or near the NRA which he is going to serve. This training situation allows the candidate to become familiar with the policies of the NRA commander early in the program and allows instruction to be tailored to the specific requirements of the area. Although the ENRO course was originally given every month, it is now given every 2 months (six times a year) in each NRA. Giving classes monthly resulted in "too small" classes and the added expense of running that many classes. (One factor in the cost consciousness of those administering this program lies in the fact that the sales motivation and training portions of the course are conducted by contract with a civilian sales training firm.) The course was originally planned for 2 weeks, but it was expanded to 3 weeks when it was found that graduates of the 2-week class were insufficiently prepared for their assigned duties. As with the ROMO course, the ENRO course provides a final screen before the new recruiter is placed on the job. Since the school was initiated in July 1972, 18 applicants have been rejected by the school staff and four have self-selected themselves out of the program.

Although the programmed input for ENRO classes is 30 applicants, the actual class sizes have averaged about 20. The content is, in general, similar to that of the ROMO course, and the topical breakdown by instructional units (a 50-minute class hour) is presented in Table 11. The areas of specific relevance to the enlisted recruiter are testing, preenlistment kits, and station management. Testing deals with the safeguarding and administration of tests and the entrance physical examination, the preenlistment kit is concerned with the contents and practice in making up the package of documents required for enlistment, and station management is concerned with the maintenance of the station notebook, prospect card used to follow up individuals, and simply "prospecting." The community affairs study area deals with promotions in the area and local advertising. Although the sales motivation units, as stated, are provided by a vendor, most of the other classes are given by the enlisted ENRO instructors on the staff of the NRA headquarters. These instructors are obligated to include a significant number of hours in the practice of public speaking, using the Gavel Club format, in addition to (or integrated within) the scheduled instructional units. One of them also gives the course of instruction in defensive driving, which must be successfully passed by all recruiters who will drive a vehicle.

Following graduation, the new input is ready to proceed to his assignment in his NRA, where learning starts in earnest.

Table 11

Enlisted Navy Recruiter Orientation
(ENRO) Curriculum

| Area | Instructional Units |
|---|---|
| Introduction to Navy Recruiting | 19 |
| Public speaking | 1 |
| Testing | 3 |
| Enlisted and Officer programs | 24 |
| Preenlistment kits | 21 |
| Defensive driving | 8 |
| Community affairs | 8 |
| Sales motivation | 21 |
| Station management | 12 |
| Critique and graduation | 1 |
| Total: | 103 |

## Other Inputs and Input Factors

The major input items, other than personnel, directly involved in the functioning of the recruiters are the real property from which they operate and the vehicles for getting around. In the realm of real property, there are the 42 NRDs from which officer recruiting is carried out and where the classifier interviewing and testing are conducted. The other major item of real property is the 1344 recruiting stations considered collectively. The command had 3509 vehicles, of which the majority were sedans leased from private vendors and the General Services Administration (GSA). Other vehicle types included Chevrolet Camaro coupes (now discontinued) and recruitmobiles (mobile exhibits). In addition to ground transportation, 47 T34B aircraft were assigned to NAVCRUITCOM to be used in the recruiting of air officer candidates. The custodians for these aircraft were the Chief of Naval Training and his agent, the Commanding Officer of Training Squadron One (VT-1) at Saufley Field, Pensacola, Florida.

The record of the hearing of the Senate Armed Services Subcommitee on Manpower in February and March of 1975 show that the recruiting cost/budget for the Navy in FY 74 was $105 million. Other sources showed the advertising budget to be $30.032 million and the NAVCRUITCOM O&MN (Operation and Maintenance, Navy) total budget to be $54.866 million. The allocation of resources is based very closely on the population of QMA. This seems to apply at all echelons of the command as a general principle. There are exceptions, of course. The advisability of using the QMA population as a resource allocation base has been questioned, especially with respect to the allocation of recruiters (Bennett and Haber, 1972, 1973). It remains an area requiring experimentation and study.

## Recapitulation

The primary inputs to NAVCRUITCOM as a system are the officers who man it and the enlisted recruiters or canvassers. Tangible inputs directly related to the functioning of the personnel inputs are real property for NRD headquarters and the recruiting stations and vehicles, both land and air, for transportation and promotion activities. Advertising dollars are identified as the major budgetary input. The norms and roles that are involved in the input to the system strongly emphasize a sales orientation and a preference for operating personnel who are generally representative of the Navy, rather than personnel or marketing and sales specialists. The allocation of the input to the field elements of NAVCRUITCOM at all echelons is based, generally, on the population of QMA served by the element.

## Support and Maintenance Subsystems

The support and maintenance subsystems provide the necessary materials for the production/throughput subsystem to function and serve to keep it functioning at a high level of efficiency. Included in the support and maintenance activities are sensing and adaptation functions, which are often treated as separate subsystems in organizations. The support subsystems are the marketing promotions carried out by NAVCRUITCOM and its contracted agencies. A support

system outside of NAVCRUITCOM in which NAVCRUITCOM personnel participate is the ASVAB testing program. The maintenance subsystems are second-level recruiter courses, periodic meetings of recruiting personnel, special topic meetings, slogan campaigns, and allowances and other supplemental benefits provided canvassers in the field.

## Marketing and Promotions

The marketing and promotions subsystem is included as a support subsystem for two reasons. First, and foremost, it provides the raw material for the production system to work--i.e., bona-fide leads by name (Figure 24). Second, it makes it easier for the production system to develop its own leads by making the target population more receptive to a Navy career. The first function can be likened to a purchasing system that buys and imports material for a manufacturing process. The second could be compared to the fire support provided a landing party on the beach by close-air support and off-shore Naval gunfire.

As developed in the preceding section on inputs, the normative model of recruiting that is used within NAVCRUITCOM is that of a marketing and sales organization and the roles that individuals play are those of sales personnel. The product to be marketed, promoted, and sold are the various enlisted and officer programs. A sale occurs when an enlistment contract is sold to an individual not in the Navy. The model is reasonable, has heuristic and practical value, and plays no small part in determining the activities of the members of the command. It is reasonable when one considers the location of NAVCRUITCOM in the Navy structure and the mission, constraints, and controls placed on it. These topics will be developed in the next section. Obviously, marketing and the promotion of programs play a major role in NAVCRUITCOM as evidenced by the portion of the budget devoted to these activities.

This sales model, in the broader context of Navy recruiting that has been developed in this study, tends to be simplistic and to create shortsightedness about Navy recruiting. This is so because Navy recruiting does not sell an enlistment contract like an insurance policy, which is a very close analogy to the sales model of recruiting. When you sell a man an insurance policy, you get his money; when you sell a man an enlistment contract, you get the man. The difference is profound. When an enlistment contract is signed, the output is a man or woman, who is, in turn, an input to the system of which NAVCRUITCOM is a subsystem. Thus, the product is manpower.

The enlistment contract or program is the price that the Navy will pay for this manpower. The service obligation stipulated in the program, for example, is one factor that determines the price that the Navy is willing to pay. The shorter the time, the greater the cost to the Navy (since inprocessing and training costs cannot be amortized as well). When recruiting is difficult, or thought to be difficult, the years of obligation are cut. The Army and Marine Corps were down to 2-year enlistments at one time. For the apprentice programs in the Navy that do not promise extensive specialist-school training, the obligated term of service is the lowest--3 years. When the Navy says that it will take a man on for 4 years for these same programs, it is paying less for the man and must add incentives such as oversea homeport guarantees to buy him for 4 years. When the Navy promises to pay out in form of

costly, extended technical training, such as the case in the AEF or nuclear fields, it requires a 6-year obligation to lessen the training costs it will pay for the applicant to sign a contract. Thus, the proper model for the system under examination, NAVCRUITCOM, is no different than the situation in industry: it occupies a position analagous to an employment agency, a talent agency, a professional personnel placement agency, or any of the other organizations that procure and provide personnel for hire on demand. The difference between NAVCRUITCOM and the personnel agencies in industry lies in the fact that military salaries are fixed--i.e., there are no incentive salaries--and so it must create incentives by "packaging" desirable alternatives into programs. In some cases, such as the DPPO program for enlisted men and specialist officer programs, an advanced rank at intake is used to create the salary incentive. Thus, the various enlistment programs are incentive alternatives that the "head hunter" (to use the vernacular of industry) can offer to procure the needed manpower. When recruiting programs are viewed in this manner, the horizon of alternatives becomes exceedingly broad as revealed in many current research efforts (Fisher and Rigg, 1974); Glickman, Goodstadt, Frey, Korman & Romanczuk, 1974; Haber, 1973).

The reason why the sales model of recruiting is examined critically at this point is not merely academic. As demonstrated above, the use of a personnel procurement model changes enlistment programs into incentive packages and not products to be sold. This opens up the examination of many tradeoffs between service costs/benefits and the purchasing power of programs (as revealed in recruiting costs). For example, a 3-year obligation for the AEF program will certainly have greater purchasing power in the form of lower recruiting costs and probably a better quality of manpower. One of the more important reasons for examining the sales model, however, is that it generates considerable role conflict. It is the norm and dictates many of the actions of NAVCRUITCOM, as mentioned. The question is whether the roles that are demanded by the realities of the situation are the same as those of the sales norm.

The answer to this question is patently obvious when one faces the fact that more potential buyers of enlisted contracts are rejected than sold. What kind of sales promotion is it when you don't let the customer buy? The problem is that the customer to be satisfied is the Navy, and the role of the recruiting system (as viewed narrowly here) is screening, evaluating, and quality control of the input (as will be developed later in the discussion of the production subsystem). Moreover, the ethics of the situation dictate that the signing of an enlistment contract and taking the oath of office result in a way of life that is as appropriate and beneficial for the individual as it is for the Navy. This is a role that experienced recruiters play most seriously, and probably play well--the role of counselor. But these roles are clearly inconsistent with the great emphasis on "closing" that the vendor attempts to instill in the ENRO student.

Another role conflict that occurs when the sales model is pushed indiscriminately is that the recruiter's time is not used optimally for the role that he is actually required to play. If the recruiter's time is required for promotional and general marketing activity, it is a loss to his role of procuring quality individuals for the Navy. If his superiors have been overly impressed by the great amounts of public speaking and community relations hours that are highlighted at the ROMO course, he may overemphasize these

activities to the detriment of the recruiter with a quota to fill. It was quite evident in the interviews that the most productive recruiting organizations were those that most vehemently denounced the use of recruiters in institutional, promotional activities, such as providing the color guard for the annual local rodeo.

In view of the foregoing discussion, it would seem proper to return to the marketing and promotions activities as support subsystems that provide quality leads to the recruiter. This is the payoff. Moreover, its effectiveness must somehow be demonstrated in terms of the leads it provides over and beyond those that would be attained without the advertising. That is, the marginal cost should be carefully examined. The reader should be aware that some 90 percent, or more, of the persons that are enlisted originally came to the recruiter by name. Other research has suggested that, by the time a person decides to meet with the recruiter, he has already decided favorably toward a job in the Navy. With these points in mind, Table 12 shows where the FY 74 Marketing Plan proposed to allocate NAVCRUITCOM advertising funds. Table 13 shows the distribution of funds according to the programs to be promoted. The expenditures shown do not correspond exactly to final budget dollars, since they were for stating requirements and planning.

Table 12

Navy Recruiting Command Allocation of Marketing Resources for FY 74

| Activity | Dollars (Thousands) | Percent |
|---|---|---|
| General media support | 17,606.7 | 57 |
| Direct sales support | 9,367.0 | 30 |
| Navy/community relations | 2,150.9 | 07 |
| Other marketing support | 1,701.4 | 06 |
| Total: | 30,826.0 | 100 |

In Table 12, the category of general media support represents advertising in public media, direct mail advertising, and other forms of public advertising. The direct sales support category includes $8.291 million for recruiting aids from counter cards ("take one" exhibits) to recruitmobiles. These efforts come under the supervision and control of the Recruiting Advertising Department and the Assistant for Advertising Coordination in the command group at NAVCRUITCOM headquarters. The Navy/community relations category includes the promotional activities under the aegis of the Recruiting Support Department. The major expenditure in this area is the academic liaison program of $1.218 million dollars. The other marketing support expenditures are for market research ($602.2 thousand), which is the sensing and adaptation effort, previously mentioned. This area also includes publishing of the Recruiter magazine, the operation of the recruiting data system that is done on contract with

Table 13

Navy Recruiting Command Promotional Support of Programs for FY 74

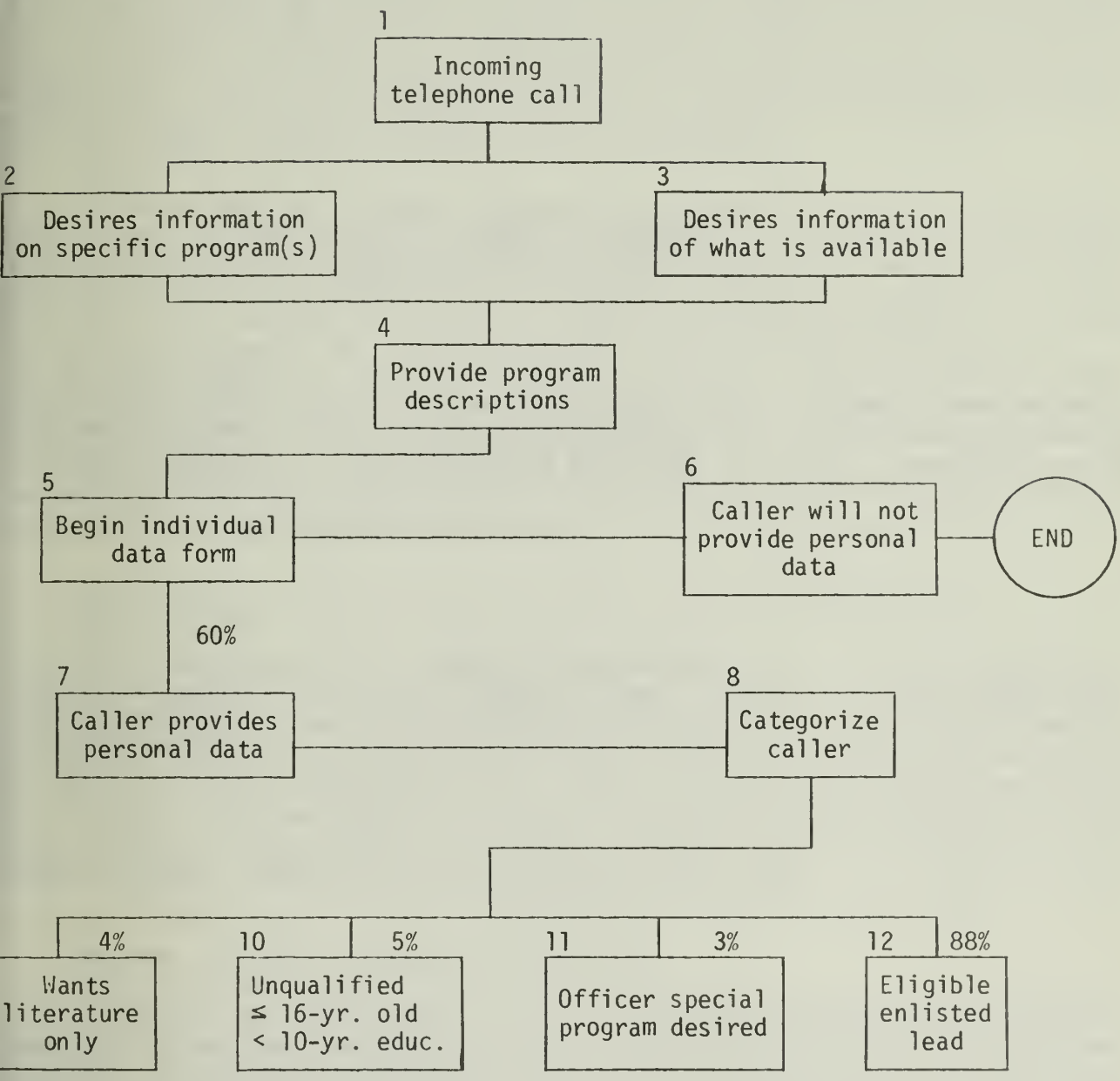
| Category | Dollars (Thousands) | Percent |
|---|---|---|
| General Enlisted | 12,043.6 | 39.1 |
| NF/AEF | 1,591.9 | 5.2 |
| Reserve | 805.1 | 2.6 |
| Reenlistments | 14.5 | --- |
| DPPO | 30.0 | 0.1 |
| Total Enlisted | 14,485.1 | 47.0 |
| General Officer | 2,604.0 | 8.5 |
| NUPOC | 803.6 | 2.6 |
| NROTC | 48.0 | 0.2 |
| Flight Officer | 2,055.5 | 6.6 |
| Medical | 656.3 | 2.1 |
| JAG | 544.7 | 1.8 |
| Total Officer | 6,712.1 | 21.8 |
| Institutional | 9,628.8 | 31.2 |
| Grand Total | 30.826.0 | 100.0 |

LisFacs Computer Corporation, and the operation of the National Navy Recruiting Information Center (NNRIC) at Macon, Georgia.

NNRIC will now be looked at in some detail to illustrate the support role played by the marketing subsystem in procuring new recruits and other personnel for the Navy. The NNRIC is collocated with the NRA 3 headquarters and supported by the organization. It has a staff of 18 operators (E5 to E7) and a chief-in-charge. It has three wide-area telephone service (WATS) lines coming in from a national net, one incoming WATS line for Georgie, two outgoing WATS lines, and one local line. In addition, it is on the FTS (Federal Telephone System) net operated by GSA. The center operates continuously over three 8-hour shifts, 7 days per week, with four operators per shift. Approximately 135 calls are received daily, and each call averages about 5 minutes. The operators manning the telephones are experienced recruiters who are encouraged to do much of the recruiter's job on the telephone when an interested person calls in. By special arrangement with NRA 3, the operators are periodically sent into the field for special duty at a recruiting station to keep themselves current with the situation in the field so that they can provide better service.

Figure 24 is a block diagram of a typical call to NNRIC from a caller who has obtained the number from a magazine ad, other public advertising, or direct mail. As the flowchart shows, he may be interested in specific programs (2) or wants information about opportunities in general (3). After initially replying to the caller's questions (4), the operator slowly, and in a conversational, friendly manner attempts to obtain personal data which he transcribes on an individual data form (5). About 60 percent of the callers provide this information (4), and 40 percent do not (6). As the operator obtains information about the caller, he attempts to categorize him, as shown in the flow diagram. Some want literature only, in which case the entry "Information Only" is made on the individual data form and the information requested is noted (9). Some five percent of the callers may be unqualified fo Navy service (10) because they have not yet reached 17 years of age or they have less than 10 years of education. These individuals, if they are under age, are sent a nice, friendly letter signed by the Director of the Recruiting Advertising Department with the Navy Opportunity Information Center (NOIC), Pelham Manor, letterhead. This letter advises the caller to continue his education, asks him to get in touch with the Navy when he becomes of age, and forwards an 8 x 10 picture, in color, of USS LONG BEACH, the world's first nuclear surface warship, along with its specifications. The individual is entered into the computer file at Pelham Manor in a hold status and is reviewed until he becomes of age or a name deletion card has been filed. When he becomes of age, a follow-up notice is sent to the local recruiter. An individual is considered to be interested in a special officer program (11) if he inquires about the nuclear program, commissioning in the JAG, or medical programs. In the case of the first two programs, the chief-in-charge telephones the information to the program managers in the Operations Department of NAVCRUITCOM headquarters. For the medical inquirer, the relevant information is sent to the nearest medical programs officer in the field.

The majority (nearly 90 percent) of all calls in which the caller provides personal data turn out to be from eligible enlisted leads, insofar as it can be determined at this stage (12). The NNRIC operator-recruiter attempts to develop the lead as much as possible on the telephone and tries to arrange




igure 24. Flow diagram of typical call received at NNRIC. Percentages show istribution at the nodes.

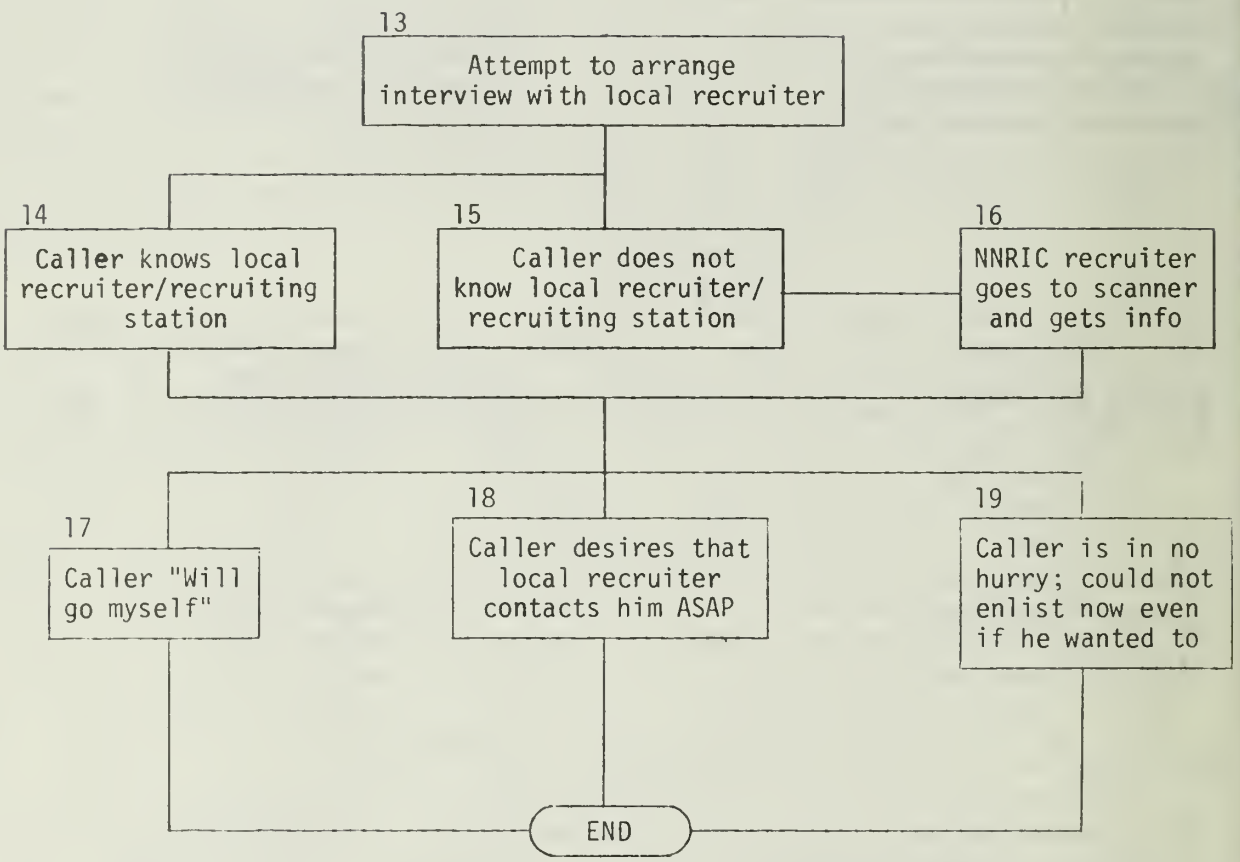



Figure 24. (Continued)

an interview with the caller's local recruiter (Block 13). If the caller is unfamiliar with the recruiter or the whereabouts of the local recruiting station (Block 15), the operator has, within reach a 3-M microcard system and reader (Block 16) so that he can quickly determine the location of the nearest station and the recruiter's name and telephone number. At this stage, the caller may say that he will get in touch with the recruiter on his own (Block 17), or he may be eager for the local recruiter to contact him as soon as possible (Block 18). In this case, the NNRIC operator calls the local recruiter immediately following termination of the call. Another outcome (Block 19) may be that the caller is not ready yet for enlisting, even if he wanted to. In this case, NNRIC calls the prospect back after 3 weeks.

Following the call, summary information regarding the call is entered on a daily log, and the individual data are transferred to a NOIC leads form which is transmitted by telecopier once daily to NOIC. There, the relevant data are placed in the LisFacs computer file, requested literature is mailed out to the individual, and followup information is sent to the local recruiter, if required. The daily log at NNRIC has a summary section that reflects the programs receiving queries and the sources from which the callers obtained the telephone number. A monthly report is submitted by the commander of NRA 3 to the Director, Recruiting Advertising Department, summarizing the daily information. As noted elsewhere, headquarters NAVCRUITCOM has initiated a formal followup program to evaluate the leads provided recruiters through national advertising and other agency sources, such as purchased lists.

## ASVAB Testing

The results from ASVAB testing, as stated elsewhere, are the single, best source of leads that the recruiter has. In that respect, it is a support function that enables the recruiter to carry out the production function. The ASVAB testing program was described in the Line 12 discussion on page 9 of this study and needs no further elaboration here. There are currently strong movements directed toward making the ASVAB the single, one-shot aptitude examination for all of the services. If this becomes a reality, the ASVAB testing and its results will become even more important to the recruiter in the field.

## Seminars, Courses, Professional Meetings

In the area of maintenance subsystems--those that influence the system to function, to continue functioning, and to function more effectively--there are a variety of seminars, courses, and professional/technical (not strictly management) meetings which have several effects on the organization. First, they keep the incumbents current and tend to keep them from going stale. They also provide information, technology, methods, and new ideas. But most importantly, many of them give the participant a sense of importance and an impression that he counts in the organization--that the organization will listen to him.

The first among these activities are continuation courses of the input schools--ROMO II and ENRO II. These tend to be direct and unstructured, to give the student an opportunity to participate and provide input into the course content, and to be directly related to the day-to-day operations and

problems of the student. Eight ROMO II seminars were scheduled for FY 74, with the first taking place in July 1973 and dealing with officer program recruitment and management. The subsequent seminar topics were to be decided and announced one month before the convening date. Each NRA was obligated to send at least one participant who was actively involved in the topic area, and the chairman of the seminar was to be the ranking officer present. The seminars took place at the ROMO school with the school administration providing the logistic support and background materials, along with similar support from cognizant departments of NAVCRUITCOM headquarters. Formal reports of the ROMO II seminars were to be published. The ENRO classes or seminars were to be conducted in a similar manner within each NRA, with coordination and support from the ROMO school. At the grass-roots level of the NRD, periodic programs called "sales seminars" were scheduled for the working recruiter. In addition to these programs, NAVCRUITCOM conducted semiannual conferences, each with a particular agenda. Participants included personnel from NAVCRUITCOM headquarters, the commanding officers of areas and districts, plus personnel from the field best qualified to talk on agenda topics.

A sterling example of the type of activity that gives the recruiter a feeling of importance and participation is the Recruiting Aids Management (RAMs) Board. This was originated by recruiting personnel in Texas and brought up to COMNAVCRUITCOM and the Director of the Recruiting Advertising Department at an opportune moment when they were in Dallas. The board which is intended to provide feedback and recommendations on advertising programs and items, meets every 3 months in Washington with members of the Recruiting Advertising Department and other concerned personnel of NAVCRUITCOM headquarters. Members of the board, who come from all areas of the command, feel that they are the voice of the recruiter and are inputting the recruiter's desires for advertising support and aids. This is an activity where the participants can see real and tangible results as advertising programs and recruiting aids are dropped, modified, or newly created according to the board's recommendations. The Navy recruiting effort, in turn, benefits greatly from this grass-roots input as to the effects and needs of the advertising and recruiting aids efforts.

From time-to-time, short tours of special duty at an RTC or other agencies help in maintaining the effectiveness of the recruiter.

## Morale, Slogans, Incentives

Another area where it is difficult for the Navy to follow a sales model for its recruiters is in sales motivation and incentives. Typically, the commercial organization has any number of sales motivation and incentives it can manipulate to maintain and increase its share of sales. Usually, sales motivation organizations are hired to put on sales campaigns with tangible rewards of considerable value. The need for such services are manifested in the number of organizations that exist to perform the services. One reason for the need is the fact that incentive programs tend to work while they are in effect, but their effect does not carry over into the normal operations of commercial sales organizations. Another factor revealed by such trends is that incentives must be effective reinforcers, and they can be maximally effective only when the reinforcement is contingent upon and follows closely the performance that is to be rewarded.

The use of tangible incentives is forbidden by law in the case of Federal employees, which includes members of the armed forces. The naive view is that they are expected to do their best and give full service without such incentives. Another, and not completely invalid consideration, is that the incentives must progressively increase if they are to maintain their effects. Others worry about the effects on those who do not receive them. Incentive plans can be authorized by Congress, but they usually tend to apply to a broad class of behaviors indiscriminately. Bonuses, proficiency pay, hazardous duty pay, and special allowances are forms that the military have been permitted to use in the past. They do not reward specific performance or noteworthy performance--a very average worker in a skilled area gets the same proficiency pay as a superior worker. Thus, no flexible incentive plans can be initiated. The one exception is the "suggestion" plans that have been formalized throughout the Federal services. The Federal Civil Service has a plan for rewarding outstanding or sustained superior performance, but the military services have abstained from such incentive programs. Thus, the traditional incentives used by military managers have been time off of work, extra duty, and promotion. Leave time is a right provided by law; thus, time-off periods become rather restricted and of limited value when personnel are not even able to avail themselves of the leave given them by law. Promotions tend to be made on the basis of meeting minimal qualifications after seniority requirements have been met.

The primary incentives used in the recruiting program are based on peer pressure and attitudes. The control systems (to be examined in the next section) used in recruiting lend themselves readily to this use. Performance with respect to quotas is used as a reflection of the position of the unit or organization with respect to others. Not only is performance reported back to the field as a control device, but these frequent reports also identify the top and bottom performers, whether they are NRAs or NRDs. Fortunately, there are so many reporting categories that one unit may be low in some areas but can be superior in others. Such a system could tend to get units to specialize in one particular program area in which they can excel. At the individual level, district commanders may use point systems as both control devices and as devices to create competition among recruiters. There is also a recruiter-of-the-year selection, but this program has as great a negative effect as it does the intended positive effect. This is because the winner is apparently selected on a basis that is not consistent with ideas of the majority of recruiters as to what constitutes a good recruiter.

Another incentive program, while not identified specifically as such, is the creation of an appropriate attitude among members of the command. At the time this survey was made, the tiger and a coined phrase, "gofer," were central to this effort. Note paper in NAVCRUITCOM had the picture of a tiger at the top with "Gofer more in 1974," or words to that effect. Quotas began to be passed out with appeals for "gofer" more. Successful recruiters and districts became to be known as the "tiger people." Some complained that it was bad to become so labelled, because those higher up in command began to count more on the "tiger people" and demand more and more of them. From "tiger people," such labels as those who "walk on water" were applied to the really superlative performers--the miracle workers. But the ESSO tiger moved over into NAVCRUITCOM when EXXON was created, and is just as apparent throughout the command as it was on television advertising. The point of the program is to create a favorable attitude toward hard work--a norm of hard work. More than just the

attitude, it created the idea that only hard work could get the job done. When one failed to meet quotas, the implication was that he had not worked hard enough. The first, and often final, answer to difficult recruiting goals and recruiting problems in NAVCRUITCOM is hard work.

## Allowances

The recruiter in the field lives in a different environment and manner than when he had a normal assignment within Navy facilities. In addition, he has extra expenses in working with potential recruits and sources of leads. These facts, and the steps taken to meet these needs, could be the basis for increasing motivation and satisfaction in the job or they could be serious, disruptive factors if they are not resolved properly. One of the allowances that a productive recruiter, a canvasser, receives is in the form of proficiency pay ("pro pay") at $50 per month. He also receives a modest increase in uniform allowance. There are two housing programs, one for bachelors and one for married persons, called family housing. One set of criteria apply to what is called the "bachelor's lease point" housing program. In this program, the government goes to a landlord and leases an apartment in the name of the U.S. Government and puts a recruiter into it. Usually, there is one recruiter per unit because there are not that many bachelor recruiters in any one place. If there are, two can share the same apartment, provided they are within one rank of each other and are of the same sex. The recruiter using such facilities loses his bachelor's allowance for quarters (BAQ). However, since most bachelor's allowances would not even approach the monthly rental of the apartment he is being provided, this is an excellent fringe benefit for a young seaman recruiter.

Family housing is a different, more complex program. There is a maximum allowable housing cost that is equivalent to the quarters allowance of the individual occupying housing. For example, the maximum allowable housing cost for an E7 is $245 per month or less. Thus, a government-provided house is limited to this amount. In addition, an NRA must adhere to a per-unit-monthly average cost, which for the entire NAVCRUITCOM was $210 in the spring of 1974. In NRA 3, it was $220. The overall effect of these policies is that the highest enlisted grades (E8, E9) and officers must negotiate their own housing arrangements.

Finally, a recruiter is reimbursed for out-of-hand expenses not to exceed $25 per month. The result is that many expenses, such as entertaining "influentials," end up coming out of the recruiter's pocket. Drinks come in the same category. Thus, while recruiters in civilian enterprise have a large leeway in expenses for prospects, the recruiter in NAVCRUITCOM is limited to an occasional quick lunch for a prospect and telephone calls from pay stations. In NRA 3, the costs were running approximately $22 per recruiter per month which, as small as it may appear, eventually runs up to a considerable amount for 1 year for the entire area command.

Overall, however, a recruiting assignment as a way of life is generally felt to be a positive factor. For most recruiters, it allows them to live in a civilian environment like a civilian, often in or close to his home town, and with status in the community.

## Information and Control Subsystems

### Overview

An overview of the information and control subsystems will first be presented to provide the background and framework for the detailed exposition to follow. The purpose of the control system is to ensure the timely output in quantity and quality of the system product--manpower for the Navy. This is done by setting goals, monitoring the progress, intervening as necessary to keep production in line with goals, and revising goals to make up for the discrepancy between goals and output.

The characteristics of the controlled process dictate the controls that will be used and the information required to monitor progress. First of all, it is a continuous flow process (to be described in detail in the following section). The continuous flow is broken up, however, by cycles within cycles. First, there is the annual cycle--the fiscal year goals. Whatever happens in one fiscal year is past history as of the end of the year. The process starts over again with the first goal and the first output of the new year. The officer procurement programs operate with only the yearly cycle within the continuous flow. The enlisted programs require closer control and operate on a monthly cycle. A monthly cycle requires weekly assessment of the process to determine whether the action on the feedback is intervention or modification of the next goal, or a combination of both. Thus, the time span of control is monthly for officer programs within a yearly cycle; the time span of control for enlisted programs is weekly within a monthly cycle nested in a year cycle. Complicating the cyclic nature of the control process is the fact that the production process can operate forward in time by banking production for future input--the CACHE program. Thus, feedforward information is required as well as feedback information. And intervention or goal-revision actions are required based on the feedforward information as well as the feedback information.

Another characteristic of the process being controlled is its multiproduct output. These are the various programs for which manpower must be supplied, and, with some allowance for seasonal trends--as in the NROTC selection process, the processing is generally parallel. That is, production for all programs goes on simultaneously and continuously. Thus, there is some possibility of trading off shortages in one program with overages in another. Moreover, there is redundancy in the processing units, as demonstrated in the hierarchical and geographic descriptions of NAVCRUITCOM provided earlier in this study. This permits the shifting of the load from one unit to another to make up for shortages, as an intervention alternative. At NAVCRUITCOM level, the parallel units are the recruiting areas; at the NRA, the parallel units are the recruiting districts; within the districts, the parallel units further break down into zones, recruiting stations, and eventually, the individual production recruiter. While this hierarchical and redundant organization provides for flexibility in the control and production processes, it very obviously necessitates a massive flow of information to determine the status of the entire production system. As a result of this need, most of the personnel of the NRD and NRA above the level of the production recruiter are directly involved in obtaining and providing this information.

Another characteristic of the process being controlled is that it must depend on an outside agency for a portion of the processing. This adds to the difficulty of the control mechanism, since it must be in the position of reacting to this agency--the AFEES. Finally, a difficult problem is the fact that the final output is not determined until some 2 months after all production processing has been completed by the system. That is, there is a gross product output, which is the number shipped to RTC for new accessions, and a net output, which is the gross adjusted for failures during RTC. Both of these factors add a moderate amount of uncertainty to the control process. But the greatest uncertainty is in the estimation of the availability of raw material in the population, which, as explained, is analyzed in terms of the market. Perhaps the greatest uncertainty with the source of supply is a factor that can be called propensity to enlist, which can be highly variable. If the propensity is high and there is a flood of raw material waiting to be processed, does the control process permit filling all foreseeable known requirements for the year right now or does it assume that the flow will continue in the future? How can the support subsystems manipulate the flow of supply to the production system, especially in the case of priority goals? As stated in the FY 74 Defense Appropriation Bill (p.33), "None of the services are (sic) able to validate or even estimate what effect a reduction or an increase of 25 percent in the advertising program will have..." Because of these uncertainties, the control process will be faced with the decision of imposing lids on production, when the supply is good; when the supply is not good, it can intervene only to the extent of exhorting greater effort.

A final characteristic of the process being controlled is the set of constraints that pervade over the individual production categories. These are qualitative constraints such as the proportion of school eligibles, mental group IV, high school graduates, females, black minorities, other minorities, and CACHE personnel that are permitted within all of the program categories. These constraints enormously complicate the control process and all of recruiting, since each, in effect, multiplies the number of controls that must be effected. The result is an additional load on the already great demands of the system for information. As for the control process itself, a norm has grown up called "fine tuning." A great amount of fine tuning, similar to balancing a production line, must be utilized to have production meet each of the segmented goals monthly, in the case of enlisted recruiting.

The discussion of the actual information and control subsystem in the following sections will pertain to those for enlisted recruiting. Generally, the basic systems are the same for officer recruiting, but since the time span of control is much longer, tight and formal procedures are not as necessary. In addition, the allocation of goals for officer programs is also dictated by the schools for higher education within a given area, as one might expect from the picture of officer programs given previously.

## Constraints

As a subordinate command to BUPERS, constraints and quotas are levied on NAVCRUITCOM by the Chief of Naval Personnel. While NAVCRUITCOM may advise the Chief of Naval Personnel regarding the recruiting situation and prospects, it does not set quotas or establish constraints. Once these are formalized in the form of instructions to NAVCRUITCOM, all it can do is attempt to fulfill them.

The enlisted constraints within which the system had to work during FY 74 will be examined first, since they are more pervasive than quotas and since several of them apply indiscriminately to all quota elements. The important constraints were:

1. Eligibility for enlistment was defined. (See Table 8 and accompanying narrative.)
2. School eligible (SE) and the complement, nonschool eligible (NSE), were defined.
3. No less than 80% of all accessions had to be SE. (85% after December 1973.)
4. The high school graduate (HSG) goal was 80% (long-range goal, 90%).
5. The male minority goal was 18% of all accessions (black, 12%; others, 6%).
6. The minority SE goal was the same as 3 above.
7. There was no restriction on the number of mental group IV personnel that could be accessioned, provided monthly SE goals (85%) were attained.
8. The following guidance was given with respect to CACHE:
   a. 100% of the chargeable (first enlistment) monthly recruit goal could be put in CACHE.
   b. NSE could be CACHED up to 10% of monthly input up to 180 days.
   c. Non-HSG (NHSG) could be recruited for the OCCSPEC program provided their OFE score was equal to or greater than 72. A maximum of 25% of the monthly quota of OCCSPEC could be NHSG in CACHE.

Other specific guidance or constraints were provided pertaining to specific programs and to special categories of applicants, such as women and persons with different categories of prior service. The primary constraints, however, were those pertaining to SEs, HSGs, and minorities. The consequence of the concatenation of these three constraints is the 12-cell, forced distribution of all new accessions (called chargeables, Quebec, or just "Q") shown in Table 14. The discussion of goals (quotas) in the next section will show how complex they are in their own right, but the most difficult control problem is to make goal attainment for the entire month fit the distribution shown in Table 14. Small wonder that the term, "fine tuning," came into such prominence. Superbly fine tuning, indeed, is needed to come close to the distribution while trying to obtain quota.

Table 14
Distribution of New Enlisted Accessions Required By Primary Constraints

| Ethnic Group | School Eligible | | Nonschool Eligible | | Total |
|---|---|---|---|---|---|
| | HSG[a] | NHSG[a] | HSG | NHSG | |
| Majority | 55.8[b] | 13.9 | 9.8 | 2.5 | 82.0 |
| Black minority | 8.2 | 2.0 | 1.4 | .4 | 12.0 |
| Other minority | 4.1 | 1.0 | .7 | .2 | 6.0 |
| Total | 68.1 | 16.9 | 11.9 | 3.1 | 100.0 |

[a]High school graduate, non-high school graduate.

[b]In percent.

One other major constraint that comes to NAVCRUITCOM is from CNET (Figure 1). This constraint is the shipping schedule to the three RTCs. The shipping schedule is given as a specific number of the monthly recruiting goal to be shipped to each RTC. There is a small problem here because some programs permit, as an added incentive, the enlistee to select the RTC he would like to attend. However, the greater problem is the requirement that shipping to the RTC be level throughout the month so that surges in the flow do not occur to disrupt the training plan.

These constraints mean that the production system must produce recruits to meet each of the quota goals distributed according to the cells in Table 14 and at a level rate throughout the month, if they are shipped to RTC. If they are to be enlisted for CACHE, they are momentarily relieved from the shipping constraint, but then they must meet the constraints placed on CACHE, constraint (8), above. The control system must ensure that these outcomes occur.

## Goal Setting

The basic mechanism for setting goals is a series of COMNAVCRUITCOM monthly notices in the 1130 series, along with changes to these notices, if required (e.g., COMNAVCRUITCOM Notice 1130.1, 2, etc.). These notices allocate the goals received from BUPERS to each of the NRA commanders. The goals were originally received and published by each quarter of the fiscal year. Since this did not give enough lead time for the first month of the quarter, BUPERS was prevailed upon to provide goals 3 months in advance. During the middle of FY 74, the procedure was changed so that monthly goals were announced 6 months in advance.

The goals are specified for each NRA by recruiting programs which are grouped by broad areas for control purposes. The areas and their constituent programs are:

1. Quebec. These are all chargeable, first-enlistment programs. They include the 6-year programs, Nuclear and AEF. The nuclear field is broken out into submarine and surface goals (later discontinued for one-goal nuclear recruiting with 75 percent of program accessions to be for submarine duty). Another set of programs consists of all of the school-guarantee programs. Finally, there is the Seafarer/Airman program, with subgoals for seaman, recruits, fireman recruits, and constructionmen recruits. Later, a subfarer category was added to go along with the basic seafarer/airfarer categories.

2. Nonchargeables. This category includes all reenlistments expressed as a floor (minimum) and a goal. The category also includes WAVES, separately broken out for the USN and the USNR. The latter is also divided into surface and air goals. Goals for all of the USNR programs are also included as nonchargeables. These programs are: 2 x 6 (A and ATP) and 4 x 10 (A and ATP) (the Ready Mariner program) stated separately for surface and air, and the 3 x 6 Air TAR program for air only.

3. Direct Procurement Petty Officer (DPPO). Quotas for procurement of DPPO enlistees are announced as a monthly prorating of the yearly goal.

The standard set by BUPERS for meeting the Q quota was ±2 percent of the stated goal. This was also stated as the standard for the NRA by the 1130 notice. The total goal was expressed as the sum of all Quebecs and Nonchargeables. To the extent that the monthly floor of reenlistments was exceeded, the excess could be used to adjust the Q goals. Accessions for the DPPO category were to be charged to the reenlistment category if they had more than 6 months of active duty or active duty for training. Over and under achievement of quotas for each goal were to be compensated for in subsequent months.

Another purpose of the 1130 notice was to specify the loading for each RTC. These were originally announced as the percent of recruits from each NRA for the three RTCs and the percent of the monthly total to be shipped each week to attain level shipping. Since this method was not very effective, each NRA was later told, in COMNAVCRUITCOM Notice 1130, how many recruits to ship to each RTC each week. Further, they were told not to deviate any more than 5% from the published schedule.

The 1130 notice was also used to revise monthly goals, to warn of no shipping dates (such as during the Christmas season), to provide changes in policy with respect to program areas, and to give guidance with respect to overshipments. In addition to COMNAVCRUITCOM Notice 1130, another publication, entitled "Hot Poop," was used to disseminate information that was immediate and urgent with respect to the recruiting effort.

Priority listing of recruiting programs and priority listing within the OCCSPEC options were also provided periodically by BUPERS and disseminated to the field by NAVCRUITCOM. Based on the RACS system, information is supplied periodically to the field as to the OCCSPEC and school seats still open.

The NRA commanders, upon receipt of their goals, partition them further to their recruiting districts. The allocation of the goals to arrive at a "fair share" is done by the population of QMAs as the only unambiguous--i.e. "hard"--way of doing it. Thus, some have it easier or harder than others, but most feel that any other way could well be worse. In true military tradition, the NRA commander does not tell the district commanding officer how he should handle the goals, but leaves it to his discretion. At the district level, where the bodies have to be produced as well as counted, different approaches are used to allocate goals. Some districts do not work on quotas, relying on the closeness with which they work and the effort each person makes to find the necessary enlistees wherever they might be best found. Other districts allocate goals to zones and from there to recruiting stations. Some recruiters-in-charge (R-in-C) of stations may even assign goals to individual recruiters. It should be noted that the goals become rapidly diluted as they are passed down the hierarchical organizations of NAVCRUITCOM. With an overall command monthly goal about twice as large as the number of recruiters, a point is rapidly reached where some of the smaller goals cannot be prorated. This makes the goal-setting procedure vastly different at the working level.

One way that some districts control the recruiting process is to establish a set of graduated points for the various programs and to evaluate recruiter production on the basis of these points. Table 15 shows a replica of the competition points that were being used by the San Francisco NRD for the month of April 1974. It is easy to see where the emphasis was being placed that month.

## Information and Feedback

The formal, basic, feedback device to keep headquarters, NAVCRUITCOM, informed as to progress toward goal attainment is a weekly/monthly telephone report, NAVCRUITCOM Report Symbol 1130-10. The report is due at headquarters, NAVCRUITCOM, each Friday at noon (local time) of the reporting NRA. It is a weekly report, except for the last week of the month, when it is both a weekly and monthly report. The report is cumulative weekly; thus, the monthly report is the cumulative report for the last week. Since partial weeks are a problem when the reporting period is the month, the COMNAVCRUITCOM Notice 1130 announcing the goals also designates the reporting days. The report reflects all of the categories covered by goals and, in addition, requires Quebec quality information by mental group and school eligibility, shipping data for each RTC, breakdown by minority categories, and the number in CACHE for each subsequent month according to goal categories, number of mental group IV, nonschool eligibles, minorities, and WAVES.

Table 15

San Francisco Naval Recruiting District
Competition Points for April 1974

| USN | | USNR | |
|---|---|---|---|
| REEN | 20 | 2X6 DELAY PROGRAM[a] | 30 |
| SHIPPED BEFORE NOON 17 April | 30 | 2X6 A SCHOOL | 35 |
| 4YR SCHOOL (OS OR SG) | 20 | 4X10 HTG[b] | 30 |
| SR/AR/FR/CR/SUB | 10 | 4X10 DELAY PROGRAM | 70 |
| H.S. GRAD OR GED | 20 | 4X10 A | 100 |
| NF | 50 | 4X10 ATP | 5 |
| AEF | 50 | 3X6 | 35 |
| DPPO | 20 | 3X6 DELAY PROGRAM | 40 |
| MIN SE | 40 | SHIPPED BEFORE NOON 17 April | 30 |
| WAVE COUNT SAME AS "Q" | | | |
| INTO CACHE | 30 | | |
| OFFICER APPLICANT | 10 | | |

[a]Delay program refers to USNR CACHE.

[b]HTG is "hot to go."

Each NRA, in assigning goals to the NRD makes a similar demand on each NRD with the time of reporting occurring at the close of business on Thursdays. Each NRD has its own method of collecting information for the weekly report which is maintained on at least a daily basis. That is, the time span of discretion in the control process is just 1 day at the district level. Some districts feed back the daily status on a daily basis to their zones and recruiting stations. The "Daily Information Sheet" of the San Antonio NRD is published daily and includes a section that documents the AFEES action for the day under a title, "Disposition of Today's Applicants."

The most difficult reporting problem at the end of each reporting period is the applicant processing through AFEES on the last day or two of the period. It is not so crucial in the weekly reports, since the applicant can be carried over to the next week, but it is very critical for the monthly report. The problem is aggravated by the fact that there is a traffic jam at the AFEES at the end of the month as all the services attempt to even their accounts for the month. The rush overloads the AFEES, and it is difficult to determine whether an applicant will make it through to be reported for the month. A large proportion of them end up with requirements for a consultation or are placed on medical hold. These do not make it for the month. A few critical cases and the fine-tuning for the month can be destroyed for a NRD. There is a smaller effect on the NRA fine tuning, since larger numbers are involved, but even at that level the changes may be quite startling in the last day or two.

Another formal feedback process is the RACS system at NAVCRUITCOM headquarters. As described previously, the RACS controls the allocation of OCC-SPEC openings and school seats. All enlistees for the Vocational School Graduate (VSG) program are also reported to RACS. Since the RACS information is maintained on a daily basis, and the automatic tabulations are performed by BUPERS, there is a daily status report for allocations controlled through the RACS system and the ratings enlisted in the VSG program.

The formal reporting system tells only a small part of the information/feedback story. It is merely a documentation of information transmission that goes on continuously throughout the echelons of NAVCRUITCOM on progress toward the recruiting goals. One area commander called the process "detailed management." By this, he meant that he called his district commanding officers daily to find out how many they had working, lined up, already "in," in CACHE, etc. Knowing this, the district commanding officer has to ask the same information of his recruiters on a daily basis. The result is "fine tuning on a timely basis." Another area commander called the process, "management of the goal." The point to be made is that information management is seen as one of the most important functions in all of NAVCRUITCOM.

## Production/Throughput Subsystem

### Overview

The production/throughput subsystem includes recruiters, classifiers, supervisors, administrative personnel, procedures, documentation, and equipment that are required to take a lead and turn it into an accession for the Navy.

Production/throughput is defined in this way because 90 to 95 percent of the output is developed from leads by name. Thus, the efficiency and effectiveness of the production process relates to how it handles a stack of names.

This section will not look into the promotional activities of recruiting personnel, such as developing community relations under the general heading of "selling the Navy." Neither will it go into the "prospecting" activities of recruiters. It is realized that a recruiter in the field must develop and maintain his own sources of leads, since the support and maintenance subsystem is not sufficiently responsive to provide him 100 percent of his needs in leads. Another facet of recruiting activities that will not be examined in detail is the behavior of the recruiter in throughput processing. This specific area is a broad research area in itself and has been and continues to be investigated by many. The Harbridge House (Note 3) study for the Army is one of the products of such research. The study being undertaken by Personnel Decisions, Incorporated, of Minneapolis, Minnesota, for the Navy Personnel Research and Development Center on the development of a behaviorally based rating scale for recruiter performance will provide a wealth of carefully evaluated information in this area.

This section will examine what the system is required to do in terms of milestones and hard copy in order to produce an enlistee. In effect, this section goes into what must be done in order to ensure the progress of an individual through the complex path he takes from the time he expresses interest in the Navy until he finds himself on the way to the RTC. First, however, the norms and practices of enlisted processing and the factors that make it the difficult process that it is will be presented to provide the background and climate in which the specific activities to be examined take place.

## General Factors Relating to Enlisted Processing

Enlisted processing must be difficult because those in the business state how much effort is required, but, paradoxically, the output figures show that a production recruiter averages less than three new accessions a month. Wherever one goes in NAVCRUITCOM the most common norm is that hard work and dedication to the job is the only way that it will get done. When serious shortfalls in the output were experienced in January and July-August of 1974, COMNAVCRUITCOM, in an effort to make up for the shortfall, could only suggest more hard work as a remedy. When individuals or units do an outstanding job, phrases such as putting in "14-hour days" and "8-day weeks" are used to describe their basis for success. One finds recruiters coming into the station at 6:30 in the morning to get the paperwork done so that normal business hours can be used for canvassing and working with prospects. Classifiers in one district take their BTB test out into the field, starting at the crack of dawn, in order to test a prospect that is "hot to go" and needs a BTB for his program. Others relegate their community relations activities to nights and weekends to preserve their precious working hours for more directly productive activities. Everywhere, there is direct and visible evidence that the hard-work norm is more than just a verbalization.

What makes canvassing so difficult? There are several broad factors that make recruiting difficult, and none of them is controllable by NAVCRUITCOM. That is, NAVCRUITCOM inherits the recruiting problems caused by the personnel/

manpower system. Without attempting to go into them in detail or to document them, some of the important factors are described in the following paragraphs. Much of the research to document these statements could be found in the work being done under the manpower resources program of the Office of Naval Research (Bryan, Note 4).

First, there are the quality standards expressed in terms of test scores and number of school years completed. The accepted norm among those in operations dealing with manpower and personnel requirements is that the higher these numbers are, the better. Given a fixed input of recruiters and dollars and a constant number of new accessions, the difficulty in recruiting can be "tuned" by the sliding of quality standards. The facts of the case are that there is no evidence that shows that these standards are related in any valid, known way at the point where it counts: getting the job done. Neither do they relate in known ways to retention of skilled personnel and motivation and morale among the work force. An exception may be in the area of high-school graduation and the frequency of problem behaviors. As a result of these facts and the norm for higher and higher numbers on the quality standards, one most serious consequence is the great reduction in the size of the pool from which one can recruit. The unsatisfactory situation that arises is that the Navy has to take what it can get. Instead of the recruiter having a broad choice of selecting the best man for the Navy, he has to "beat the bushes" (in their terms) to find someone who will meet the standards and sign up. The majority of experienced recruiters that the author spoke to greatly regret the large number of "good men" that they have to turn down.

Another important factor affecting the difficulty of recruiting is the job/occupational structure for which it must recruit. Individual areas are narrow, specialized, and rigidly specified--the legacy of the scientific management era when manpower was unskilled, plentiful, and cheap. The system is wasteful of manpower, creates greatly increased requirements, and generates tremendous administrative complexity. The BUPERS staff generates priorities for the various occupational specialties (based on established numbers and not, necessarily, on operating the Navy) and the RACS system must account for the prevailing situation in a large number of categories for a lengthy period of time. The average recruiter in the field cannot possible know enough of all the jobs to counsel a prospect properly on most of them, and it is impossible for him to maintain current knowledge about the situation of openings in the near and more distant future. However, the greatest recruiting problem is probably the fact that prospective recruits do not want such narrowly defined niches that he might find himself in for an interminably lengthy period of time.

Related to the occupational structure is the training system that has a once-removed, secondary effect on recruiting. When the majority of training is lock-step, mass processing of trainees and evaluation of the trainee is normative referenced, the output of training is characterized by speed of learning and a place on a curve. These are the things that are predicted by test scores and academic achievement records. But if training is individualized and criterion referenced so that every trainee who graduates is competent in the tasks that he will face in his first, post-training assignment (the purpose of training in the first place), the selection (and consequently the recruiting picture) would be materially changed.

The final personnel/manpower factor to be discussed influencing recruiting difficulty is the value or incentive quality of the various programs. This was previously discussed as being indicative of the price that the Navy is willing to pay for a recruit. If the price is too cheap in terms of what competitors in the market can provide, recruiting becomes difficult, hard sell, and counterproductive. What the prospective recruit is looking for is some flexibility in the commitment that he must make with his life--fate control, as one team of researchers calls it. This is not only in how much control he loses at the time he signs up, but also in terms of what opportunities there are for him to second-guess himself. He is also seriously concerned about attaining formally accredited training and education that much of Navy training does not provide, but there is no recruiting program that will guarantee him opportunity in these respects. Finally, as stated, they have no desire to be stuck in a narrow, confining specialty. Recent research among Navy enlistees has shown that, among those who express an intention to reenlist, there was a greater proportion of individuals who had experienced a major change in jobs in the last 6 months. Other than the incentive value of the programs themselves, the recruiter must rely on tangential and fringe benefits such as RTC selection, schoo port and homeport guarantees, exchange privileges, extra-duty educational opportunities, and so forth.

In addition to manpower/personnel policy factors, the administrative and management controls (mentioned in the preceding section) make recruiting difficu Some of these are imposed by BUPERS, others are the result of NAVCRUITCOM policy and practices. The assignment of goals based on total population and the requirements of the constraints in the matrix shown in Table 14 place the greatest stress on enlisted recruiting. Take, for example, an area in the Southwest United States where the majority of the population is Mexican-American and American-Indian. For every one SE-HSG Mexican-American a district recruits, it must find 14 majority SE-HSG recruits. This means that early in the month, ever effort must be made to recruit majority SE-HSG recruits so that it can determine how many other-minority SE-HSG recruits it can safely recruit. Other districts might have just the opposite problem. All districts have the problem of balancing the matrix, so the tactics of "front loading" must be resorted to. That is, recruit the hard ones early in the month, then fill in with the easier categories at the end to make the quota. Using this tactic, it is not possible to "level ship" to the RTC, and, in spite of monthly exhortations, the RTC fall heir to the problems created by the need of recruiters to watch their "front loading." The goals for different programs vs. the availability of recruits vs. the requirements of the constraint matrix also mean that each recruiter must establish an informal CACHE system for himself. That is, he must have, in the wings, individuals who are ready to go or sign up at any time, once the higher priorities have been met. Frequently, this tactic is referred to as having him in your "hip pocket." Good recruiters have a large hip pocket.

Two specific examples will be used to illustrate administrative complexity as a burden on recruiting. First, the enlisted, recruiting manual (Cruitman-Enl 1130.8) had 22 published changes during its existence of some 2 1/2 years. The first change to the second edition was in the hands of Cruitman-Enl holders before the manual itself was received. Many of the changes are quite substantial and required hand entries in various parts of the extant manual. The other example refers to Reserve recruiting and to the 4 x 10 Ready Mariner program in particular. The One Navy recruiting program has necessitated the learning of a second language among Regular Navy recruiters. When the 4 x 10 program was

first announced, it was so complex that no busy recruiter could set the time aside to sit down and assimilate it. If the reader will refer back to Table 15, the competition points for San Francisco NRD in April 1974, he will see that the 4 x 10 A school program warranted 100 points--twice as much as for the AEF or NF (nuclear field) programs of highest priority. These examples are not made critically, but to show that the strictly administrative control of recruiting can play a significant part in the difficulty of the recruiter's job. As a result, COMNAVCRUITCOM initiated a program to cut down on the administrative load, called "ADMINIZE"!

This section has presented in an overly compact form the author's evaluation of what makes recruiting so difficult today based on interviews, observation, and the literature in the field. He may not be correct in all of the particular views expressed, or he may only be partially correct in others, but the point to be made is that recruiting--in the true system sense--cannot be removed from the larger systems of which it is a part and that the problems that are attributed to recruiting are largely imposed from outside the recruiting activity itself.

## Documentation for Enlisted Processing

The documentation or "hard copy" that must accompany a recruit applicant to the AFEES for entry into the Navy will be examined, since a knowledge of these requirements and the flowcharts described earlier will provide a reasonably complete picture of the milestones in the recruiter's processing of an applicant. The documents required for enlisted processing are as follows:

1. Basic Required Documents. These are the documents that go into essentially all enlistment "kits" or packets.

   a. Enlistment Contract (DD 4)
   b. "Page 13" of Service Record (NAVPERS 1070/613)
   c. Report of Medical Examination (SF 88)
   d. Report of Medical History (SF 93)
   e. Statement of Personal History (DD 398)
   f. Armed Forces Police Check (DD 369)
   g. Verification of Birth (DD 372)
   h. Record of Emergency Data (NAVPERS 1070/602)
   i. Fraudulent Enlistment Warning Sheet (NAVPERS 1130/2)
   j. Affirmation of Truthfulness (NAVPERS 1130/8)

2. Documents Required for Waivers. The additional documents listed below may be required to support waiver cases.

   a. Personal Character Reference (DD 370)
   b. Employer Reference (DD 370)
   c. School Reference (DD 370)
   d. Financial Statement (NAVPERS 4101)
   e. Report of Home Visit (NAVCRUIT 1130/14)

3. Frequently Required Documents for Special Cases. These documents are frequently required by broad categories of applicants.

a. Consent, Declaration of Parent or Legal Guardian (DD 373), for all applicants under 18 years of age.
b. National Agency Check (DD 1584), for all CACHE, 40 days or more.
c. Statement of Understanding and Agreement (NAVCRUIT -130/10), for all 6-year obligors.
d. Evidence of Citizenship (NAVCRUIT 1100/1), for all naturalized and derivative citizens.
e. Statement of Name for Use in Official Military Records (DD1916), for all whose name is different than shown on birth certificates.

In addition to the foregoing, there is an equally long list of documents that are required in more restricted cases, such as special enlistment programs, USNR programs, veterans with prior service, and those relating to marital status and children.

The number of documents and the time required of the recruiter to complete them have been of concern to those who would lessen the administrative, non-productive time of the recruiter. A sample of processing times for the forms, taken from a thesis by Corsey (1975) conducted with this author as adviser, is shown in Table 16. The times were obtained from an analysis of timeclock entries on a master record accompanying enlistment kits and showing the activity conducted between time clock entries. Most of the required forms are short and involve checks or fill-in words. The range of times reported in Table 16 probably results because of the time taken to obtain the information from the applicant and evaluating it properly for the required entries. The only lengthy form is the Personal History Statement, but this is usually given to the applicant to take home and complete, as are several of the other forms. An experienced recruiter who had gone through the earlier 7-week Bainbridge, Md course for recruiters (predecessor to the ENRO course), which included typing instruction and filling out of forms as part of the curriculum, stated that the average enlistment kit took no more than 25 or 30 minutes of his time. This would appear quite possible if one credited him with the minimum times reported in Table 16. On the other hand, if a recruiter were to guide an applicant through each of the questions on the Personal History Statement, he could well spend a whole afternoon at it.

Word processing systems, centrally located at the NRD headquarters, were being suggested as a way to alleviate some of the load of processing forms from the recruiter. Some questionnaire and interview studies were conducted in the Los Angeles NRD about the feasibility and advisability of installing such systems. Actual system tests were run. An informal investigation of the entries that actually had to be made on the forms by the recruiter, conducted at the San Francisco NRD, showed that the name and social security number of the applicant were the only items that were duplicated to any extent among the forms. Obviously, word processing systems cannot be of material benefit when applied to short, one-time entries. Also, the occurrence of errors in the forms is frequently cited as source of problems. At the time of this study, the RTC submitted a periodic report to COMNAVCRUITCOM showing the errors that had been picked up at the RTC in the enlisted documentation received. Word processing systems were thought to cut down on errors, but error studies in other fields have shown that the more often a piece of information is handled, the more frequent is the error. Moreover, a word processing system that fills out the

Table 16

Recruiter Time Used in Completing Documents
For Enlistment Kit
(In minutes)

| Document | Minimum | Mode | Maximum |
|---|---|---|---|
| Enlistment Contract | 9 | 24 | 44 |
| Medical forms | 4 | 13 | 43 |
| Personal History Statement | 7 | 18 | 80 |
| Armed Forces Police Check | 3 | 12 | 82 |
| Fraudulent Enlistment Warning Sheet | 5 | 15 | 32 |
| Record of Emergency Data | 6 | 7 | 32 |
| Affirmation of Truthfulness | 7 | 12 | 18 |
| Reference requests | 5 | 21 | 66 |
| Financial Statement | 9 | 24 | 37 |
| Parental consent form | 5 | 21 | 44 |

Note: Corsey, 1975.

forms for the recruiter would only be of material benefit if the time saved were actually useful. That is, a recruiter spends a few minutes here and a block of minutes there on the forms. The question is whether a system that saves him bits of time in scattered blocks returns to him a single block of time that he can use beneficially. Whenever a centralized and specialized approach is taken to a set of tasks, formal procedures are established and have to be adhered to in order to make the system function efficiently. Will such rules simplify or complicate the processing of applicants? Will they hasten or impede the processing time? Can they be flexible enough to be responsive to special cases? Will they save total manhours? These sorts of questions did not seem to have the appropriate study and answers at the time this study was conducted and when tryouts of systems were being conducted. Probably the worst approach to the study of proposed systems was that the advantages of a centralized, word-processing system were being investigated by the organization that would supply the equipment.

On the other hand, the use of such equipment to help the recruiter with material that is long and must be repeated frequently would be of great help. Most of such items would be form letters that could be stored so that the recruiter need only supply the variable portion to have the letters prepared automatically. Followup letters would be one area where the system could benefit him. There are other similar areas.

A systems analysis of the hard copy requirements could also help in streamlining forms and procedures and reducing error. Included in such a study should be methods for maintaining reference and guidance material for the documentation that is more easy to manipulate and maintain than the current Cruitman-Enl, where the instructions are contained. As for procedures, the kits are currently being reviewed by the recruiter-in-charge of a station, the zone supervisor, the regional supervisor (if there is one), the chief recruiter, and by the AFEES liaison personnel. Other considerations aside, such multiple handling of the documentation certainly does not help to speed up the process of applicant processing, to which attention now turns.

## Milestones in Applicant Processing

The milestones in applicant processing that a recruiter goes through are a combination of the flowpaths described previously and the completion of the documents mentioned above. In addition, processing requires the documentation to go through channels to the AFEES. Much of the processing action takes place in fairly large blocks of time, so that the time required and the sequence of completing many of the individual items do not have any great significance in the overall processing time or sequence. That is, when three things are completed in the same block of time, it does not matter which is done first, and the time that is of significance is the total time to complete the three items and not the individual item times, themselves. When the production process is looked at in this manner, it turns out that there are not many different paths that can be taken.

For the Corsey thesis, data on processing times and sequences were obtained in the manner stated from 33 recruiting stations in NRA 8 which processed through five different AFEES. The stations were also classified as to large (four or more recruiters) or small and near (less than 50 miles) or far

rom the processing AFEES. Over all of the data from the individual kits, two rocessing sequences were observed with approximately equal processing times n the larger blocks of events. These are shown in Figure 25. Both flows A nd B consider the need for police checks (PCs) as an independent event that lays a dominant role in determining the time required for processing and the robability that the applicant is acceptable to the Navy. The time required or police checks is of uncertain length if they must be obtained by mail from distance. What the recruiter does in the meanwhile appears to be determined y his expectations for the turn-around time. The recruiter in flow A wants o make sure that all necessary events are scheduled to be completed before he police checks return because he is weighting the short turn-around times ore heavily. That is why he schedules the physical and BTB testing and hands ut the Personal History Form (DD 398) at the same time. He may have to can-el the scheduled physical and BTB examinations if the form 398 shows a history hat will result in complex, time-consuming processing. The recruiter in flow would rather see the completed form 398 before he schedules the physicals nd BTB examinations. In doing so, he may save the unnecessary scheduling of vents that will not take place, but he will tend to push back the completion imes of the physical and BTB testing so that they may more nearly coincide ith the average length of time required for the turn around of police checks, ather than the shorter times. Both flow A and flow B recruiters use the form 98 information to complete or start other forms (which could be done central-y with word processing equipment if the information on the form 398 were there). hen the police checks and the physical and BTB results are together, and barring o unexpected complications, the recruiter integrates the material into the kit, ills out "page 13," signs the package, and it proceeds on its way. His routine uties are essentially complete.

The package goes through the channels mentioned and may sit at the main tation (NRD headquarters or the Class A station) until the applicant is ready o ship, or it may be processed to the AFEES and held there. As the time lines how, 18 days are required for recruiter-responsible events, 2.6 days are re-uired for midlevel supervisory events, and, after the package reaches the main tation, 10.9 days are required for a total of 31.5 days from start of process-ng to the man shipping to RTC.

The recruiter must manage several of such flows simultaneously to achieve is output for the month. In addition, he has to perform other duties and aintain and/or develop his contacts. It can be seen that learning to manage is affairs efficiently is a prerequisite for effective recruiter performance.

The sequences shown in Figure 25 may not be representative of actual pro-essing times, however, for several reasons. The primary reason is that a election process takes place along the way. Only those who go all of the way hrough the process and ship out will have total event sequences and process-ng times. Others will have been dropped or stalled at some midpoint during ne data collection period of some 2 to 4 months. Some may have been CACHED n the field without going through the AFEES. Others may have been stopped emporarily for medical consultations or holds or the need for a waiver. Some thers would have changed their minds and dropped out of the process, and still thers might have been eliminated for other reasons. Because of such possibil-ties, the processing times suggested by Figure 26 may be underestimates. That s, they are most representative of the direct-ship, uncomplicated case.

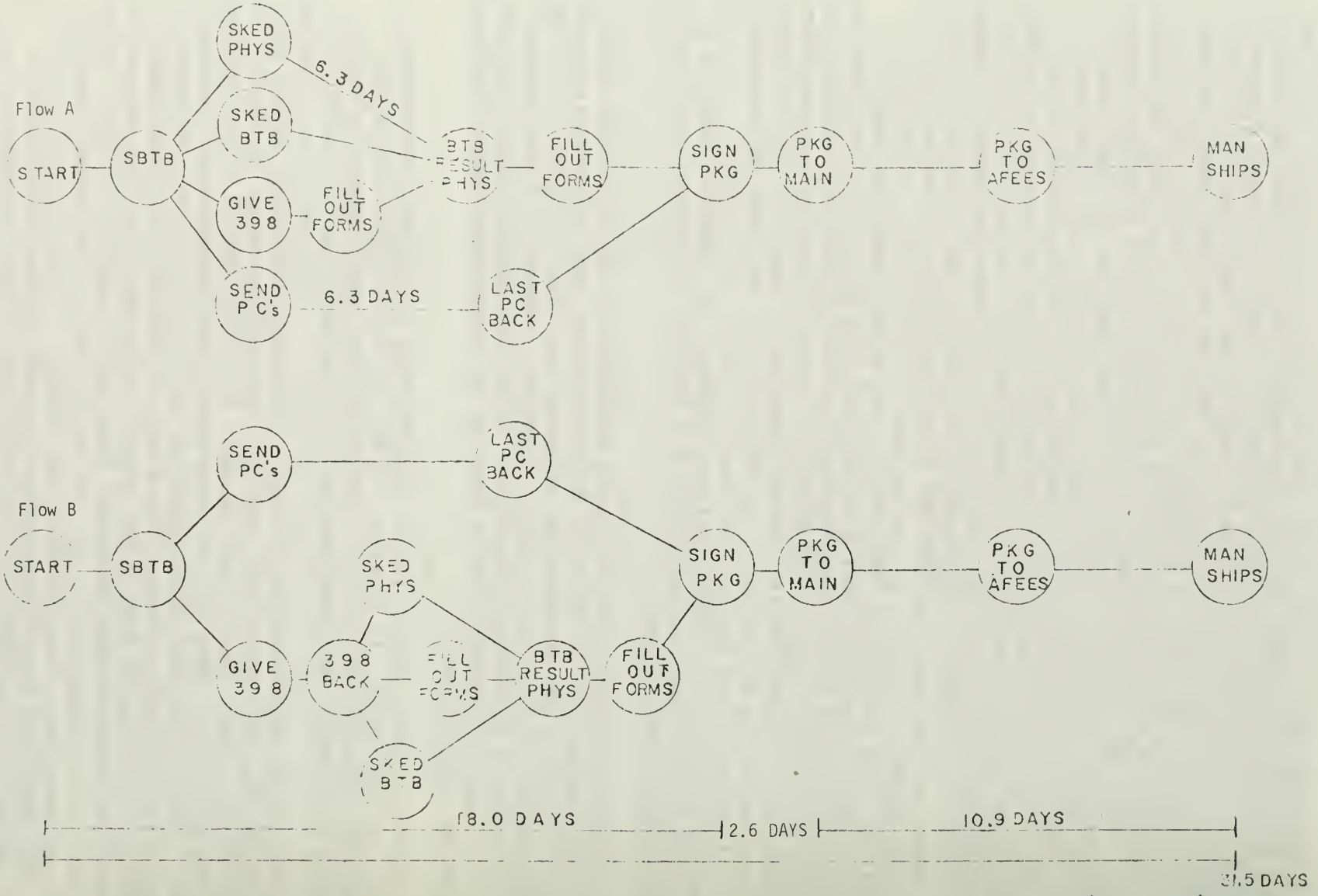



Figure 25. Commonly reported processing flows. Two of the most commonly reported processing flows are shown with some significant processing times (not to scale).

With respect to the variables investigated in the thesis study, there are obvious reasons why the processing AFEES, distance from the processing AFEES, and the size of a recruiting station may influence the sequence and timing of events in the production process. Statistical analysis of the collected data were inconclusive, however. First, the overall design was unbalanced so that all of the cells that represented the intersection of the three variables did not have data. In addition, there were grossly unequal numbers of observations among the cells of the design. No direct control could be exercised over the data collection, and different recruiting station start times resulted for a variety of reasons. But perhaps the greatest reason for the nonsignificant results was the variability of the data. This could be due to two sources--error in the data collection and the inherent variability in the processing of individual applicants. There was an indication, however, that all three variables--the AFEES processed through, the size of the station, and its distance from the processing AFEES--interacted in a complex manner in determining the time for completion of all recruiter-responsible events. The other item to show significant effects were the measures related to police checks. Again, there was a complicated interaction involving the distance and size factors of stations with respect to the time taken to obtain police checks. It is easy to imagine the factors that could lead to such interactions, but it would be far wiser to investigate more fully the area of obtaining police checks, since every applicant must have them and because, as shown by flows in Figure 25, they exert a dominant influence on the processing of applicants.

## AFEES in the Production of Accessions

As previously stated, an uncertain factor in the production of recruits by NAVCRUITCOM is the AFEES, which are operated by USAREC with headquarters at Fort Sheridan, Illinois. They are jointly staffed by the military services and located strategically across the United States to facilitate the intake-processing of individuals into the process. Their primary function is to conduct physical examinations. They also review records for completeness, perform the actual enlistment formalities, and ship the new accessions to their initial destinations.

This is the first place that the potential enlistee receives his taste of military regimentation while undergoing the entry, physical examination. Since the AFEES were established to process, primarily, selective service entrants in large numbers, their appropriateness for the all-volunteer force is somewhat strained in at least two respects. First, during selective service, an orderly, predictable flow of persons could be established by the simple device of ordering the draftee to the AFEES on a certain day. This orderliness is more difficult to establish now because of uncertainties in the recruiting function and because more individuals now take the prequalifying route in which they process through the AFEES more than once. In addition, CACHE personnel require a second physical immediately before entering the Regular service. The production/throughput system of NAVCRUITCOM requires flexible and rapid processing at the AFEES; the AFEES, on the other hand, with reduced resources and the scarcity of medical manpower, needs a level flow that will prevent peak demands for many processors. As discussed above under the control subsystem of NAVCRUITCOM, it is necessary to have small cycles within the week and to have larger cycles by the month with the greatest inputs coming at the end of the period.

Thus, the best of relations is required to have an AFEES that will stay open on Saturdays near the end of the month and process peak loads, but these seem to be the rule. On the other hand, the probability that an applicant will be placed on medical hold is certainly higher in the last day or two of the month.

The second carryover from selective service days is the regimentation and starkness of the facilities for conducting the physical examinations. Whether this is undesirable is debatable: perhaps it is a good screen for the undesirable enlistee or perhaps it deters the enlistment of a highly desirable candidate. Many recruiters keep their fingers crossed as they send an applicant to AFEES, not because they fear the applicant will not pass the physical examination but because of the adverse reactions he might have to the environment at the AFEES.

### Recapitulation

A limited view was taken of the production or throughput subsystem of NAVCRUITCOM as a system. Nevertheless, it was shown how the difficulties involved in producing the output of new accessions are related to demands and constraints placed on NAVCRUITCOM from outside sources. Then, examining applicant processing from the physically necessary steps that documentation requires, it was shown that these are complex processes that could be examined in much greater detail to improve procedures, forms, requirements, and equipment that would result in a continuing improvement of recruit processing in general. With respect to officer procurement, the forms and procedures are even more complex, but greater recruiter time and attention can be given to them. The specific items that are added to their processing are a National Agency Check for all, interview and interviewer appraisal sheets, character referrals as a routine matter, and records of educational performance. In addition, the application leaves the recruiting district and proceeds through a complex chain of reviewers in higher headquarters before a selection of an applicant is made. This chain may take months, in some cases. The relationship of some supply and demand "operators" in the officer procurement situation have been examined in a thesis by Shields (1975), also done in connection with this study and with this author as adviser. The reader is advised to examine this thesis if he is particularly interested in the area of officer recruiting.

## System Outputs

### Overview

This final section will examine the output of the system in FY 74 to provide feedback to what has been said in the preceding sections of this portion of the study. It will also examine the output as it interacts with the first consumer of the product, the recruit training centers (RTCs), and provide historical interest.

### Gross Static Output

Table 17 shows the gross output of the system in FY 74 from preliminary summaries produced at the end of June 1974 by NAVCRUITCOM headquarters. Only broad

Table 17

Production By Program Areas in FY 74

| Program | Goal | Attained | Percent of Goal |
|---|---|---|---|
| | Enlisted | | |
| Seafarer/Airman, 3- and 4-yr. | 16,072 | 32,530 | 202.4 |
| 4-yr. Programs, OCCSPEC, A School | 45, 846 | 31,907 | 69.6 |
| 6-yr. Programs | 9,282 | 8,831 | 95.1 |
| Nuclear Field | (3,940) | (3,702) | 94.0 |
| Advanced Electronics Field | (5,342) | (5,327)[a] | 99.7 |
| Total Chargeables | 71,200 | 73,268 | 102.9 |
| Wave Recruits, USN + USNR | 6,287 | 6,894 | 109.7 |
| Reenlistments | 7,200 | 7,437 | 103.3 |
| 2 × 6 to Active Duty | 9,288 | 10,512 | 113.2 |
| Ready-Mariner (4 × 10) | 3,649 | 2,778 | 76.1 |
| 3 × 6 Air TAR | 347 | 435 | 125.4 |
| Filipino | 1,265 | 1,271 | 100.5 |
| Direct Procurement Petty Officer | | 510 | |
| Subfarer | | 398 | |
| Total Enlisted, USN + USNR | 98,640 | 101,907 | 103.3 |
| | Officer Candidate | | |
| Air Officer Candidate | 642 | 656 | 102.2 |
| Navy Flight Officer Candidate | 590 | 611 | 103.6 |
| Nuclear Program Officer Candidate | 73 | 52 | 71.2 |

Note: Source: NAVCRUITCOM Program Analysis for 1-30 June 1974 and FY 74.
[a]Includes 198 AEF WAVES.

program categories are shown and, of the officer programs, just those pertaining to the primary officer candidate procurement effort. The notable points in the table are the 102.9 percent accomplishment of the total chargeable goal and the successful inputs to the highest priority programs (NF and AEF). Among the USN programs, the 4-year category was considerably behind the goal, and among the USNR programs, the Ready-Mariner (4 x 10) program proved very difficult to fill. The over-200 percent attainment of the Seafarer/Airman goal shows where it was possible to attain the success in the overall "Q" goals. The picture would not be complete, however, without stating that 42 percent of the Seafarer/Airman input was in 4-year programs and that 60 percent of the total input was school eligible. Accordingly, many of these recruits would be going on to occupy school seats and enter occupational fields that are a part of the OCCSPEC program. This path was formalized during the year with a PSI (Programmed School Input) program in which a 4-year enlistee was guaranteed input to a school program from a fleet assignment. That is, he did not enlist for a particular school but went through recruit training and into a fleet assignment before going to an A school.

The air officer candidate programs are obviously following goals closely, but, as explained previously in this study, the nuclear officer programs remain difficult positions to fill.

Table 18 shows the distribution of new accessions (chargeables) by mental group category. The trend in these distributions is the smaller proportion of MG I input from the selective service years, but the continuing strong input of those in MG II. At the other end, a very low input of MG IV persons was the result. The legal upper limit of the latter, set by Congress, was 18 percent for FY 74.

Table 18

Production By Mental Group Category in FY 74

| Mental Group[a] | Numbers | Distribution (Percent) |
|---|---|---|
| I | 1,785 | 2.4 |
| II | 24,210 | 33.0 |
| III | 44.668 | 61.0 |
| IV | 2,605 | 3.6 |

Note: NAVCRUITCOM Program Analysis for 1-30 June 1974 and FY 74.

[a]USN Chargeables.

Table 19 shows the fiscal year accomplishments by qualitative standards, the constraints discussed in the section pertaining to the control subsystem. Compared with Table 14, where the goals were shown, the minority accessions fall slightly short of total goals but remain strong in the school eligible category. Of all USN chargeables, the school eligible goal, which was 80 percent for most of the year, was exceeded slightly. The short-range goal of 85 percent high-school graduates and the long-range goal of 90 percent high-school graduates were missed by a considerable margin. This, no doubt, reflects the large number of Seafarer/Airman accessions.

Overall, with minor modifications and some specific exceptions, the recruiting system did match production with requirements and the subsystems described in this portion of the report seem to function as formulated to produce the output.

## Dynamic Quantitative Aspects of the Output and Their Relations with the RTC

The dynamic aspects of the output of the system can be discussed and shown in their relationships with the first customer, the RTC. By using shipments to the RTC as the basis for analysis, all chargeables and new nonchargeable accessions will be included in the total. Thus, it provides a very representative measure of the output of the recruiting system with respect to enlisted inputs to the Navy.

Based on monthly NAVCRUITCOM summary reports of shipping to the RTC, Table 20 was created to show the relationship between goals and shipments by month for the fiscal year. The overall trend is fairly linear. That is, a reasonably comparable proportion of the total is programmed and shipped each month. The trend is more readily visible in Figure 26, which graphs the cumulative data of Table 20. The programmed curve is steep in July, August, and September following graduation of new QMAs from high school. It is low in November and December, when the holiday seasons occur. The planned input is steepest in January, to make up for the slowdown in the preceding 2 months. Then, as stated very early in this report, June has to be used as the buffer to make up for what may be year-end shortages.

The monthly shipped curve follows the programmed curve very closely, but it cannot make the transition to the steep input programmed for January and lags for several months by that amount. As a result of the January shortfall and other strength accounting returns, the Navy was approximately 6,000 understrength. The Chief of Naval Personnel authorized NAVCRUITCOM to recruit an additional 6,000 enlistees during the March through June 1974 time frame. As the data in Table 20 and the curves in Figure 26 show, approximately 2 months were needed to crank up the effort to input the additional authorized overstrength. The shipping curve overtakes the programmed curve only in May and June. This add-on demand undoubtedly had an effect on the number of Seafarer/Airmen recruited during the year and a reduction in the proportion of school eligibles and high-school graduates. This would lend support to the statements made previously that the number of accessions that can be produced by a fixed input of recruiters and assets is by sliding the quality scale. While it cannot be proven, there was a severe shortfall in recruiting output in July and

Table 19

Production By Qualitative Standards in FY 74

| Category (Percent Legend) | Numbers | Percent |
|---|---|---|
| Minority Accessions | | |
| Black (Percent of accessions) | 7,883 | 10.8 |
| Black School Eligible (Percent of Black) | 6,242 | 79.2 |
| Other ethnic minority (Percent of accessions) | 2,871 | 3.9 |
| Other minority school eligible (Percent of minority) | 2,270 | 79.1 |
| All USN Chargeable Accessions | | |
| School eligible (Percent of accessions) | 59,750 | 81.5 |
| High school graduates (Percent of accessions) | 49,690 | 67.8 |

Note: Source: NAVCRUITCOM Program Analysis for 1-30 June 1974 and FY 74.

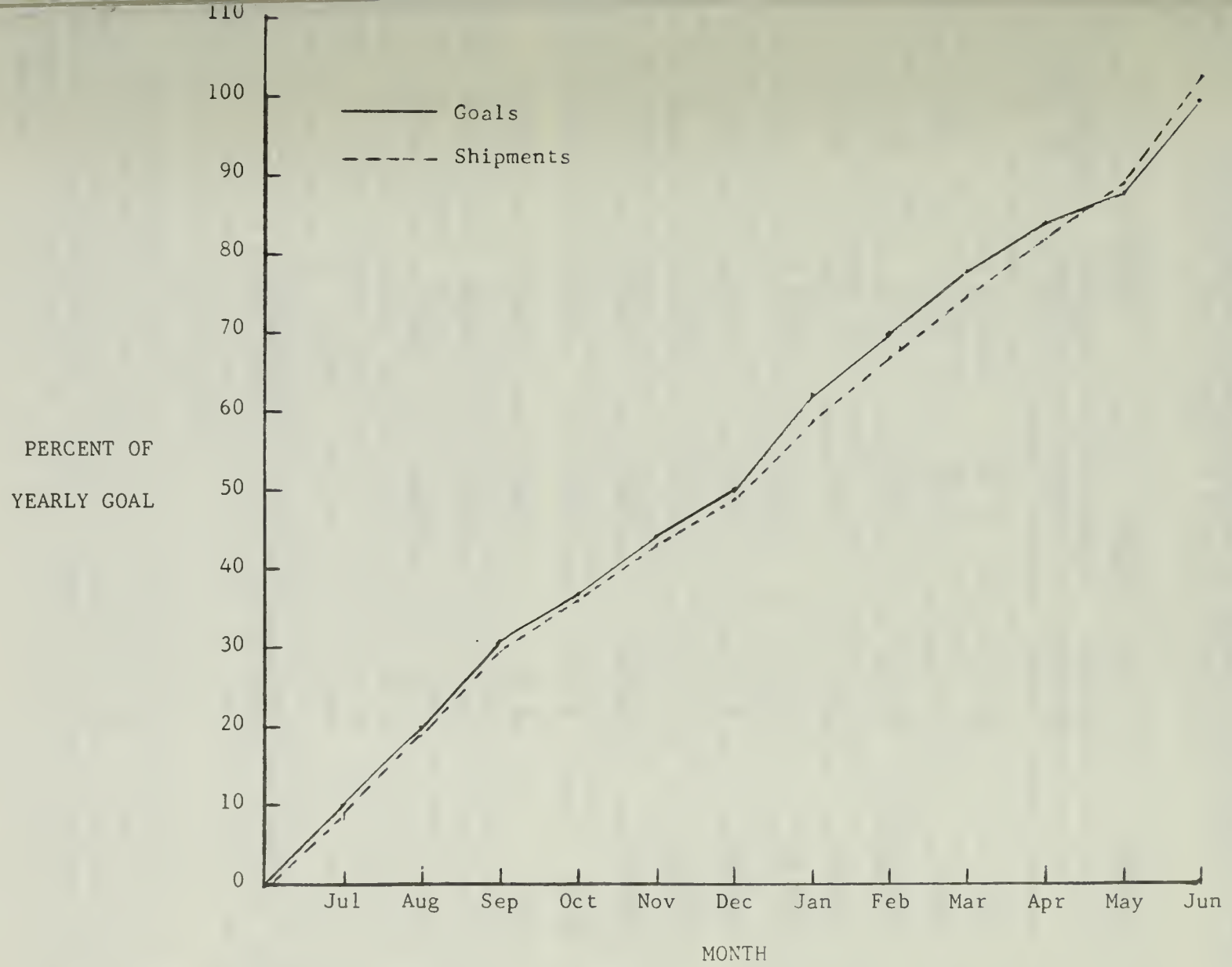



Figure 26. Cummulative monthly shipments of new accessions to RTC as a percent of total FY 1974 goal.

Table 20

Monthly and Cumulative Monthly Shipments of Accessions
To RTC As A Percent of Total FY 74 Goals and Shipments

| Month | Goal (79,949) | | Shipped (82.609) | |
|---|---|---|---|---|
| | Percent of Goal | Cumulative Percent | Percent of Goal | Cumulative Percent |
| July | 10.15 | 10.15 | 9.83 | 9.83 |
| August | 10.14 | 20.29 | 10.11 | 19.94 |
| September | 10.41 | 30.70 | 9.71 | 29.65 |
| October | 6.37 | 37.07 | 6.94 | 36.59 |
| November | 7.49 | 44.56 | 7.16 | 43.75 |
| December | 6.03 | 50.59 | 5.36 | 49.11 |
| January | 11.98 | 62.57 | 10.54 | 59.65 |
| February | 7.96 | 70.53 | 8.00 | 67.65 |
| March | 8.30 | 78.83 | 7.91 | 75.56 |
| April | 5.52 | 84.35 | 6.87 | 82.43 |
| May | 4.26 | 88.61 | 6.98 | 89.41 |
| June | 11.39 | 100.00 | 13.93 | 103.34 |

Note: Source: Monthly shipping reports of NAVCRUITCOM.

August of 1974 which would seem to be an effect of the extra effort exerted during the last quarter of FY 1974. Very early in this study, it was asserted that continuing exhortations to maximum effort must result in a compensating deterioration of effort at a later time. In addition to the swings in the effort dimension, a finite number of prospects are used up.

A control problem mentioned earlier was the requirement to meet shipping schedules to RTC within a ±5 percent tolerance of the published allotments. This requirement could be broken in two ways: (1) by an uneven distribution of recruits to the three RTCs--Great Lakes, San Diego, and Orlando--and (2) by deviations from level shipping during the month. Table 21 shows, for each month of FY 74, the percent of monthly goals to be shipped to each RTC and the percent of actual total shipments. That is, the percentages for the goals and the percentages for the shipments are ipsative measures. Those monthly shipments that deviated more than 5 percent from the programmed shipping have been underlined in the table. First, it is evident that there are seasonal trends: recruits do not want to go to Great Lakes in the winter, and Orlando, Florida, is very nice in January and February. While seasonal trends may be affecting shipments to San Diego, it is apparent that the problem San Diego experiences is that it is just a popular place. It is overly shipped in every month except June and July, and in five of those months, it is overly shipped by a margin greater than 5 percent. Another trend that is evident from Table 22 is that decreeing greater numbers to a particular RTC does not bring immediate results. Great Lakes must have been quite empty by the spring of 1974, so large quotas were published for April, May, and June. As with the 6,000 add-on procurement mentioned above, it apparently requires time for the system to change. Perhaps portions of the system wait to see whether some other party will make up the change, and when the change is not sufficient, it exerts more effort in the new direction. This is a 2-month lag, as suggested by the trends.

Table 22 and Figure 27 show shipments to all of the RTCs by weeks of the month during FY 74. The average number shipped for each week was calculated from the 12 monthly figures, except for the fourth week of March for which data were not available. Because the first and fourth weeks had variable numbers of days, the data for these weeks were normalized to a 7-day week. Thus, the number shipped is somewhat smaller than indicated in the other tables and figures. If level shipping were carried out, the curves in Figure 27 would be straight lines on the diagonal from lower-left to upper-right. The data show that 43 percent of the monthly total is shipped in the last week. Hopefully, it should have been brought out in the preceding exposition that this is the only way that the system can function and meet the demands made on it. The obvious correction is to have staggered months for the NRA with only two beginning their months in any one week.

The problem that such cyclic inputs create for Orlando RTC is due to the fact that the facilities and personnel are allocated and staffed to handle two new recruit companies a day, each with 76 recruits. Thus, a maximum load is 150 recruits per shipping day. When the number is increased to, say, three companies, the requirements for training facilities and instructors is essentially doubled.

Table 21

Correspondence Between Goals and Shipment to RTC By Monthly Percent of Goals and Shipments for FY 74

| Month | Great Lakes | | San Diego | | Orlando | |
|---|---|---|---|---|---|---|
| | Goal % | Ship % | Goal % | Ship % | Goal % | Ship % |
| July | 37.81 | 42.68 | 31.92 | 31.75 | 30.26 | 25.57 |
| August | 38.19 | 41.28 | 31.43 | 32.18 | 30.37 | 26.54 |
| September | 40.89 | 37.78 | 28.95 | 82.38 | 30.16 | 29.84 |
| October | 40.07 | 31.39 | 29.96 | 35.77 | 29.96 | 32.84 |
| November | 35.00 | 30.60 | 30.98 | 36.58 | 34.01 | 32.82 |
| December | 37.00 | 29.60 | 30.99 | 35.88 | 32.01 | 34.52 |
| January | 36.98 | 25.98 | 33.03 | 36.35 | 30.00 | 37.68 |
| February | 37.00 | 29.00 | 33.02 | 33.53 | 29.98 | 37.47 |
| March | 36.72 | 32.11 | 33.40 | 38.29 | 29.88 | 29.60 |
| April | 47.63 | 26.97 | 26.67 | 34.06 | 25.70 | 28.97 |
| May | 46.99 | 39.42 | 26.02 | 32.23 | 27.00 | 28.34 |
| June | 42.00 | 44.96 | 30.95 | 28.12 | 27.05 | 26.91 |

Notes: 1. Source: Monthly shipping reports of NAVCRUITCOM.
2. The goals for a month add up to 100 percent; the shipments for a month add up to 100 percent. Underlined entries indicate a shipping discrepancy of greater than 5 percent of the programmed figure.

Table 22

Mean Weekly Shipment of New Accessions to RTC in FY 74

| Week | Numbers Shipped | Percent of Total | Cumulative Percent |
|---|---|---|---|
| 1st | 961 | 16.44 | 16.44 |
| 2nd | 1,045 | 17.89 | 34.33 |
| 3rd | 1,335 | 22.83 | 57.16 |
| 4th | 2,504 | 42.84 | 100.00 |

Note:
Source: Monthly shipping reports of NAVCRUITCOM. Because the first and fourth weeks had variable numbers of days, they were normalized to 7-day weeks. Data were missing for the fourth week in March.

## Qualitative Relationships of the Output with the RTC

Qualitative relationships engendered by the output of the recruiting system on the mission and activities of the RTC may create problems for the recruit and the RTC and may reflect back on the output in terms of those rejected from the service during recruit training. Accordingly, the gross output does not tell the final story; the production of the recruiting system must wait for the recruit to go through his training successfully before he can be counted toward net production.

One way in which the recruiting system may affect the RTC is in the accuracy and quality of the enlistment processing. This may result in minor but sometimes aggravated squabbles between the agencies on paperwork, when the RTC feels that the recruiters have sluffed off on their paperwork, knowing that it will be corrected at the RTC. More serious cases occur when the enlistment processing was incomplete or actually fraudulent. The former could include such shortcomings as the failure to obtain parental consent when required or waiver documentation. The latter could occur with the revelation during recruit training of previous service, a police record, and other facts that required a waiver or were actually disqualifying for the program under which enlistment was effected.

Another area of interaction between the Recruiting Command and the RTC occurs when the RTC determines that the individual is not qualified or fit for service. When this occurs, who is responsible--the recruiting command or the RTC? Obviously, time in training ought to have an effect. If the person is found to be unfit early in training, the recruiter could be blamed for sending the person to the RTC. When the determination of unfitness occurs later in training, the recruiter might rightfully blame the RTC for "demotivating" the individual. In the first half of FY 74, information provided by RTC Orlando showed that the distribution of attrites was as shown in Table 23. The attrition rate was approximately 10 percent of new arrivals. The preponderance of cases was those deemed unsuitable, and of these, lack of motivation

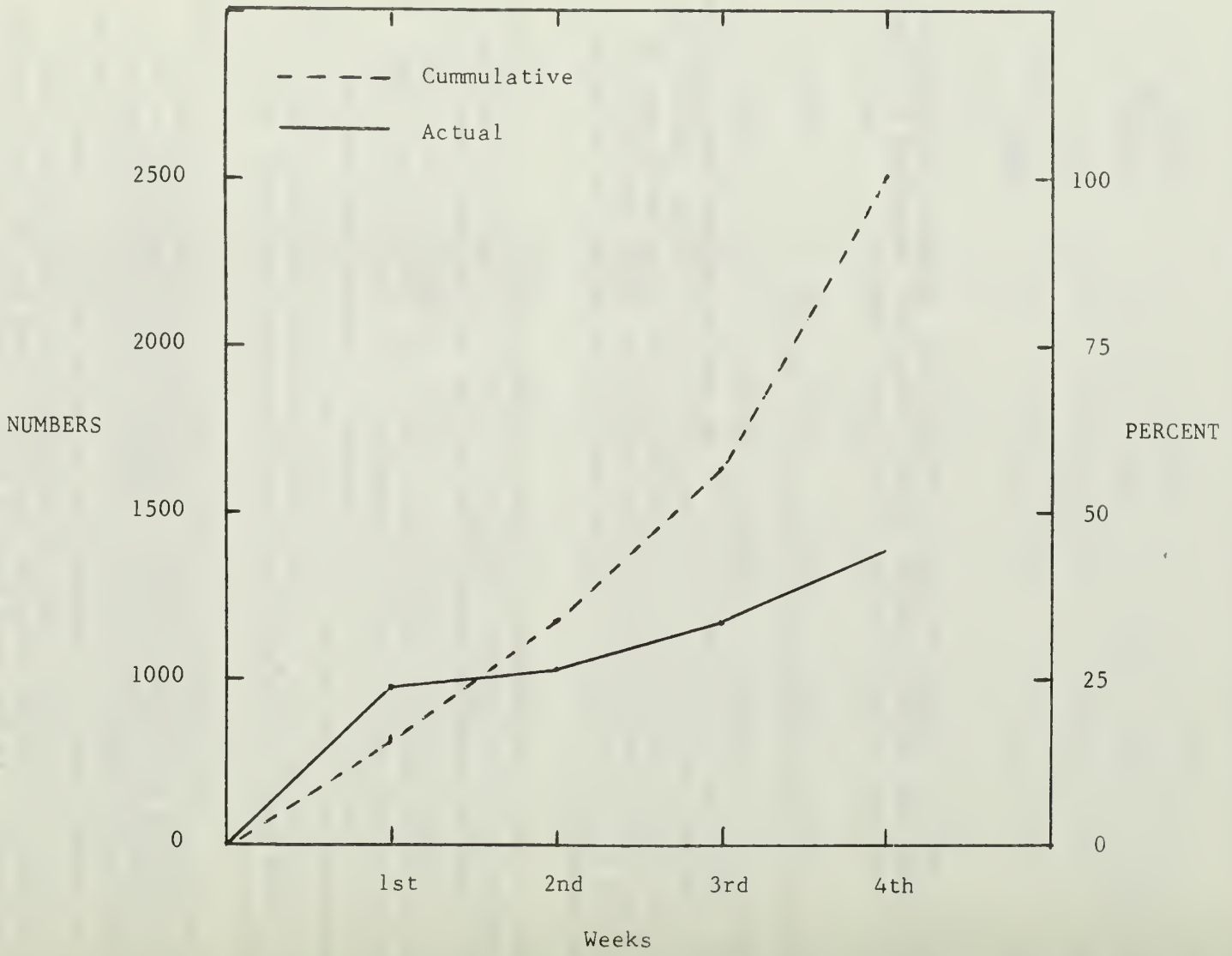



Figure 27. Weekly shipment of new accessions to RTCs in FY 1974. Cumulative curve shows percent of total shipped at each succeeding week of the month. Actual curve shows actual numbers of recruits shipped by week.

and immaturity were the primary causes for the determination. Compared to FY 73 data, the trend seemed to be toward a greater proportion of unsuitability attrites. The ratio of losses due to unsuitability and misconduct to medical causes was 2.44-to-1 in FY 73 and 3.78-to-1 in the first half of FY 74. Thus, it would appear that the burden is greater in the AVF for the recruiting command to make inroads into this number of losses. The attritee returning to his home may severely derogate the Navy--honestly or to rationalize his ouster. But it may be that those who would listen to him may be of similar ilk.

Another area of interaction between the recruiting activity and the RTC is in the classification of individuals. All individuals are initially classified or receive additional classification at the RTC. When the classification section at the RTC arrives at conclusions that differ with those of the recruiting command, a serious problem arises between the Navy and the recruit who turns out, at this stage, to be unqualified for the program for which he enlisted. Excluding valid differences in opinion, the cases obviously in error appear to stem from the recruiter or NAVCRUITCOM classifier's unfamiliarity with all the enlistment programs. For example, the recruiter may give the candidate a program on the basis of his aptitude test scores and overlook some physical requirements, such as "no defective color vision." In other instances, the recruiter may have projected erroneous or actually false information to the prospect, but he is not there to defend himself against such charges made by a manipulating recruit. Making better use of enlisted classifiers at the recruiting activity and requiring the BTB may cut down on problems in this area.

Two very obvious misclassifications occur with some frequency. These are the inability to swim and the inability to read. The swimming inability is quickly revealed when all new recruits undergo the swimming test. The inability to read must be caught in the training cycle, and here there may be cause to question the honesty of the recruiter. When there is sufficient basis for doing so, the case is reported directly to the Special Assistant for Sales Management (Code 013) in the headquarters of NAVCRUITCOM. Both remedial swimming and remedial reading classes exist at the RTC for the recruit that needs them.

When the recruit completes his training and goes on to Class A school or the fleet, the recruiting system has completed its job for the time being. As the flows described in earlier sections of this study show, the recruiter may meet him again as a prospect for a different program.

Table 23

Comparison of Attritions By Cause at Orlando RTC for FY 73 and FY 74
(In Percent)

| Cause | FY 1973 | FY 1974[a] |
|---|---|---|
| Misconduct | 7.1 | 9.5 |
| Medical | 28.2 | 20.3 |
| Unsuitability | 61.6 | 67.4 |
| Miscellaneous | 3.1 | 2.8 |

[a] From July through December 1973.

## RECOMMENDATIONS FOR FURTHER RESEARCH

Rather than attempting to summarize or draw conclusions from this examination of Navy recruiting as a system, this final section of the study will describe areas for further research suggested by the analysis. Doing so will, in effect, provide a summary of the critical issues brought out in the study. In addition, since the primary audience was the researcher interested in Navy recruiting, suggesting further areas of research will serve to conclude the study in the reference frame of the target audience.

### Development of a Measure of Productivity in Recruiting

A serious problem in evaluating recruiting efforts and programs is the lack of a general measure of productivity that reflects the differences in value of the products produced--i.e., accessions in many different categories. The only extant measure is counting. Thus, a NSE, NHSG seaman recruit is one accession; so is one SE, HSG nuclear power recruit. The various categories of recruiting production must be scaled and weighted to provide a value-referenced index of productivity.

In order to operate incentive programs and competition in recruiting, the services have devised their own scoring systems. These systems have arbitrarily scaled the various program and quality categories of enlisted accessions as a result of, or in anticipation of, the difficulty in attaining goals. When one program is experiencing difficulty, the credits or points are increased. The end result is that the system becomes reactive to recruiting shortfalls and turns into a compensatory tracking system with the oscillations that are characteristic of compensatory tracking. Actually, the system may induce the oscillations by the arbitrary way in which it assigns points.

There are several possible approaches to a system of measuring productivity that is more realistically oriented to the actual value of a particular type of accession. One way would be to ascribe values to various categories based on the dollars that are spent on training and paying the individual. The number of positions in the Navy for a particular enlisted classification and the reenlistment rate in that classification might also be incorporated into the measure as an indication of the long-term service need for individuals in that category. The proportion of applicants who are qualified for a particular classification could also be considered in devising an index that is used to measure productivity. Finally, long-term trends or history of shortages in particular ratings could be used to represent the need for individuals qualified to fill those ratings. If several measures are to be used, the problem--in addition to data collection and scaling of each measure--is a method to combine the candidate measures. Perhaps multiattribute utility estimation or multidimensional scaling techniques would have to be used, if no other way could be determined to combine them without recourse to human judgments.

## Development of a Method to Measure Area Potential for Enlistments

A serious problem in allocating recruiting resources and in evaluating the performance of recruiting elements is the difficulty in measuring or predicting the recruiting potential of a particular area. The output of a particular recruiting element is, necessarily, determined in part by the particular set of circumstances prevalent in its area of responsibility. The only general basis in use is the number of QMAs in the area. Some attempts have been made to adjust resource allocations on the basis of experienced area production, but the factors that determine fluctuations in production have not been systematically investigated.

Three problems arise in the determination of factors that affect the enlistment potential of an area. First, relevant and available demographic data are usually old or become so rapidly. For example, the 1970 census is used for many calculations of area enlistment potential. Updating the census is a difficult procedure that may add noise of its own in the process. The U.S. Army, however, is attempting to develop means for revising the census to reflect current trends. Second, the data sources for demographic-type data do not have the same geographic boundaries as the elements of the recruiting command and are then difficult to apply. Third, data that might be most relevant are difficult to obtain or they are not public information. This is particularly true of data at the level of the local community. It may also be true that the indicators of recruiting potential at one level of aggregation may not be the most appropriate at another. Finally, many efforts to develop models to predict enlistment potential are limited by the techniques that have been used. Usually, regression procedures are involved.

It is recommended that all sources of relevant and available data be used to develop models to evaluate or predict the recruiting potential of an area or, for that matter, the entire population of potential recruits. The models, however, must be carefully cross-validated in several ways. First, there is the usual cross-validation that is concurrent and uses a sample maximally similar to the original sample. To be used at a different level of aggregation, the model must be cross-validated again for that particular level and adjustments, if necessary, must be made in the model to predict at different levels. The model must also be validated temporally to determine whether it is appropriate in a different time period. If necessary, the proper functions must be developed that enable the model to predict in time. A model that would have great utility would be one that would measure area potential at the level of the individual recruiter or recruiting station. But any model, to be used operationally, must be appropriate to the intended use, and it must use data that are current and readily available.

## Development of an Index of Recruiting Effectiveness

An index of recruiting effectiveness would be most useful in planning, programming, and reporting on recruiting programs. Such an index would require a measure of production (discussed above), and a measure of opportunity, or the area potential measure described in the last section. The index of recruiting effectiveness would be productivity over area potential. When weighted by the resources required to produce the output, the index would measure the cost-effectiveness of the recruiting effort being evaluated.

## Evaluation of Judgmental Processes and Subjective Decision-Making in Recruiting

While a great deal of effort and resources are expended in validating psychometric selection procedures, important decisions and judgments are made by individuals and groups in a strictly subjective manner. The reliability, biases, and validity of such procedures are not known.

Dynamic decision-making is involved in the recruiter-applicant processing described in the flow diagrams of this report. It is not known how and on what basis many of the decisions are made. The importance of the various choice points have not been evaluated, and the results of such decision-making have not been systematically investigated. Formal interviews, both structured and open-ended, are required in recruiting applicants for service and in recruiting recruiters for the recruiting command. Formal waivers that require a great deal of effort on the part of all echelons of the recruiting command, including COMNAVCRUITCOM headquarters, are required for a large number of reasons. These formal procedures require judgments and decisions by individuals and groups at several levels of command. The "whole man" concept is used as the criterion for making these judgments and decisions. It is operationally defined as the answer to the question, "Would I like to sail with him?"

With respect to the recruiter-applicant chain of events, the important nodes and choice alternatives at the nodes should be identified. The basis for selecting a choice alternative at each node should be determined, and the transition probabilities between points should be evaluated. Of special importance would be the comparison of individuals who did not continue processing with those who did.

The formal interviews should be evaluated by any of a number of commonly available techniques for determining the reliability within and among interviewers and among those who make decisions using interview results. If the reliability is poor, the investigation could pause at this stage and attempt to improve or discontinue the interview. Validation of the interview procedures would require that all who are interviewed be allowed to proceed into their respective programs. Then, it could be empirically determined whether the interview indicators adequately predict the performance and success of the incumbents. Proper precautions would be required to keep the interview from biasing the outcome of the investigation--that is, those in the evaluation environment would have to be "blind" to the true interview results.

Evaluation of the validity and reliability of waiver procedures would follow the methods described for the interview. In addition, the investigation should attempt to determine if the waiver was needed in the first place--i.e., the validity of the reason (cause) for the waiver--and the level at which decision is made with respect to the waiver. This is, why should the decision be any better at the NRA level than the NRD or NAVCRUITCOM headquarters level? The waiver procedure, or a large segment of it, could turn out to be unnecessary.

Finally, actuarial methods should be devised and evaluated against the interview and waiver procedures. The OEF score is one such procedure. Findings in other fields have shown that actuarial decision-making is as good or better than clinical decision-making.

## Development and Evaluation of Recruiter Selection Procedures

The selection of enlisted recruiters is based on a personality inventory, an interview, and record of past performance in the Navy. The personality inventory, the 16PF, has little or doubtful utility in the selection process, but the primary problem in its continued usage is the lack of a more definitive study of its usefulness. The problem with the interview was already discussed in the section above. The relationship of past Navy performance to success in recruiting is not known. Especially lacking is a knowledge of the specific aspects of a person's past performance that are used by different individuals to evaluate a candidate for a recruiting assignment. It could well be that characteristics counterindicative of successful recruiting are being used with a positive weight by some persons who evaluate a candidate for recruiter duty. In general, the situation is also the same for the selection of officers for recruiting duty.

A major difficulty in formulating and validating selection procedures is an absence of a reliable and valid criterion or standard. Global ratings by supervisors, as used for the 16PF study, have doubtful value as a criterion. They may tend to self-fulfill the selection of recruiters that was done on essentially a similar basis. A measure of recruiter effectiveness would be available if the research previously suggested were successful. While such an index would be absolutely essential in evaluating or validating a selection procedure, it is less useful in developing one because it does not suggest how a recruiter became to be more effective.

The development of a recruiter selection procedure must be preceded by a thorough analysis of the position that will show the functions performed and the relative frequency and importance of the functions. It will also be necessary to obtain knowledge as to the types of behavior that are necessary to carry out these functions successfully and the types of behavior that are detrimental. There is nothing new in this approach, and several techniques are available to achieve the products required. The task inventory method that has been institutionalized in the Bureau of Personnel could provide the description of the job of recruiter. The method of developing behaviorally anchored rating scales could provide the desired list of behaviors. Knowledge of the job content and behaviors necessary to carry them out should provide the material to develop a recruiter selection procedure. The selection procedure could then be validated against the index of recruiter effectiveness. It should be apparent, too, that the development and validation of training programs require the same background data and validation schema. Moreover, as the recruiting process becomes more specialized and fragmented between those who develop prospects, process applicants, and those who test, interview, and "close" the sale, the foregoing personnel procedures become even more important to ensure the presence of an effective field force in recruiting.

## Evaluation of Enlisted Selection Criteria and Procedures

When the relationship of personnel selection criteria or standards to recruiting was described, the difficulty of recruiting was said to be a direct result of selection standards imposed on the recruiting command, and the standards were clipped (up or down) depending on how difficult it was to meet goals. The general norm was that the higher the quality (as defined by selection standards),

the better the applicant. Unfortunately, even with the imposition of high standards, 1 in 10 recruits do not complete recruit training, and 7 to 21 percent of the very highest category (Category A) in the OFE table (p.58) do not complete their contracted term of service with a recommendation for reenlistment. These and other facts warrant the question, are the selection procedures cost-effective? If not, what needs to be done to make them so.

The selection problem goes beyond the scope of this study. Accordingly, the scope of the remarks and suggestions made here will be limited to selection problems that are closely related to recruiting for the Navy. Since the completion of the data collection for this study, two items have been brought to the attention of the author that are pertinent to the question being probed. One comes from the Air Force and it calls attention to the record there in recruit training as a refutation of what was earlier said in this report that a 10 percent attrition rate would be difficult to improve upon at the RTC. The other item is that there are very gross differences among the three Navy RTCs in the reasons given for attritions during recruit training. Considering the method of assigning recruits to the RTC, there cannot be that great a difference The conclusion must be reached that administrative convenience influences choice of reasons for attrition. There is also the likelihood that the Air Force recor may be due, in part, to the fact that both the recruiting service and the basic training command are subordinate activities within the Air Training Command. Whatever the factors that may be involved, attritions from RTCs should be thoroughly investigated so that they may be better understood and the record improve

The U.S. Army follows its recruits for 180 days and reports to the recruiting command the disposition of all recruits in that period, which terminates with the assignment and adjustment of the recruit to his first duty station. The U.S. Air Force feeds back information for 2 years on the progress of its recruits. Thus, in addition to clarifying the current situation in RTC attrites, the Navy should consider the establishment of a better feedback system so that the efficacy of the initial selection procedures can be continuously assessed.

The meaning and value of the OFE score should also be examined in a very fundamental way. One example of the questionable value of the OFE score was given above. A more revealing example is this. Individuals scoring highest in Category L of the OFE table--those whose aptitude scores are so low that their entry into the service is limited by law--have a higher OFE score (83) than one of the subcategories of Category A (79). Moreover, the Category L individual scores higher than any Category B individual (highest OFE, 79), who is in the very top grouping of aptitude scores. The question that these relationships raise asks what is happening to the pool of qualified prospects as the test-defined quality standards are raised? Certainly, their odds for effective service are not raised. What about the reenlistment rate as the quality standards are raised?

It was mentioned in the discussion that the selection tests predict well the score of a person in training that is normatively scored and "lock step" scheduled. Completion of basic training, rendering effective service, and reenlistment appear to depend on a constellation of factors that go under the rubric of personality or motivation. These are evaluated subjectively by the recruiter and his superiors and by those who take action on waiver requests. The fallibility of such decision-making was brought out above. There are per-

sonality and interest inventories that could be substituted or incorporated into the evaluation procedure. Personal history and background factors that, together, may be more diagnostic than just high-school completion and expulsions could be formalized for actuarial evaluation of the applicant for enlistment. Finally, the possibility of using recruit training as the selection device should be thoroughly examined, either by simulation or empirically or both. If recruit training were to be made a 2-way street wherein the individual recruit had the option of continuing on in the Navy or getting out and where the Navy had the opportunity to observe the individual and decide whether to accept him for further Navy service or not, many of the problems that are prevalent now might be removed. In addition, the quality of basic training would certainly improve, and the Navy would have better motivated sailors. The long-term cost-effectiveness might greatly exceed the increased costs that would be envisaged using such a system. The use of recruit training as a selection vehicle would also adhere more closely to the requirements of Equal Opportunity legislation and the landmark court decisions that have followed.

## Examination and Development of Recruiting Incentives

A commitment ot Navy service involves a tradeoff between perceived positive and negative outcomes, and it is these perceptions on the part of the prospect that determines, in part, the difficulty and costs of recruiting. The combination of factors that maximize the incentive value of an enlistment contract should be examined along with their costs and benefits to the Navy.

The examination in this report of Navy enlistment contracts suggested that their incentive values have not been developed in an integrated, systematic manner. Ad hoc incentives are offered from time-to-time in a haphazard manner to entice enlistments in specific programs, although pay and monetary benefits are the primary incentives. On the other hand, the primary consideration in creating enlistment contracts appears to be a strong desire by the Navy to extract a maximum of payback time for the initial acquisition and training costs of an enlistee. The result is a strong negative incentive value to the overall enlistment package.

Recent studies have shown that the desires and needs of young people today are not what have been offered in the form of incentives. Greater freedom of choice in career decisions, educational benefits (self-improvement), and variety, interest, and challenge in jobs appear to be among the leaders in potential incentives. This means that the job and career structure in the Navy must be changed so that they are broader and permit considerable lateral movement into parallel career paths. Given this job/career structure, the problem then becomes one of determining how to arrange alternate periods of training and utilization to permit freedom of choice for the individual, variety in assignments and jobs, and an incentive in continuing his service career. Every attempt should be made to qualify service training and experience for sanction and recognition in the skilled trades of the civilian labor force in order to increase reenlistments and permit more lateral entry into the service of individuals with desired skills.

The key to the approach suggested is a larger number of choice points and more alternatives at each choice point in Navy service, including that of getting out. The possible benefits to the service from more flexible programs lie in

lower recruiting costs, a higher quality of interested persons, a larger sample of prospects from which to select recruits, better motivation and job satisfaction on the part of incumbents, a higher rate of manning in the skilled positions of the Navy, a greater number of reenlistments (even if the rate does not change), and, most importantly, a large pool of trained veterans in the civilian population. The study of such approaches would probably be best done, in the early stages, by simulation and sensitivity analyses to determine possible cost/benefits of alternative strategies. The Nurse Corps program, where very short contracts are available, might be examined to determine factors involved in their cost/benefits to the Navy medical service. Eventually, carefully designed trial programs will have to be attempted to validate the reasoning and the simulation studies.

## Development of Information Systems

The analysis of Navy recruiting as a system emphasizes its enormous needs for information. At the canvasser level in the field, there is a need for occupational information, status of open rates, and a reservation system for occupational specialty and school-seat openings. The prime concern of the management is for information regarding the status of programs with respect to goal accomplishment. Then there are the information needs that might be generically classified as system behavior information. These would include feedback on the product, resource utilization, area production and potential, indications of advertising effectiveness, and information for assessing recruiting effectiveness.

The answer to these needs is an efficient, automated information system. It should be labor-saving rather than labor intensive, the critical information must be available in near-real time, and, to be most useful to the recruiting management, it should have predictive capabilities. To be predictive in the longer term, the model for enlistment potential that is validated for predicting in time will be required. If this is to be a part of the information system, considerable data from outside the recruiting command will be required that must be maintained in as current a state as possible. For the information system to be predictive in the short term, however, it could rely on its own sources of data because recruiting is a sequential process that covers a considerable time span. Given a program for which enlistees are needed, there are advertising projects, inquiries in response to the advertising (prospects), applicants for enlistment, qualified applicants for enlistment, applicants into CACHE, and finally, applicants shipped to RTC. Given a model of this sequence and the means to derive the necessary indicators from the ongoing processing of recruiting goals, the information system should be able to preview enlistments in days and weeks and provide a valuable tool for management.

## Miscellaneous Suggestions

Other areas for research have been suggested by this analysis of Navy recruiting, but they will not be developed as full recommendations because there is not sufficient substance to lead to such recommendations or because the author has no specific proposals to make. A listing of such topics would include the following:

1. Incentives for Recruiters. Within the constraints of the current laws, develop and study the effects of incentive programs for recruiters that provide tangible rewards.

2. Job Enrichment. With the increasing know-how in recruiting for an all-volunteer force, specialization of functions has begun to set in. The danger is that many individuals will be engaged in ever narrower activities. The challenge is to develop organizations and job structures that will enrich the recruiting environment. Vertically arranged teams might be one answer--e.g., specialized recruiters, zone supervisors, and personnelmen. The recruiter--personnelman relationship will be especially important.

3. Advertising Effectiveness. An entire disciplinary area within marketing exists that has developed techniques to assess advertising effects. It is mentioned here for completeness.

4. Work-Methods Study of Recruiting Functions. The Air Force Recruiting Service has conducted a detailed work-methods study of recruiting in the Air Force. The results might be studied to determine whether they can contribute to Navy recruiting or whether a similar study effort is warranted in the Navy.

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ABBREVIATIONS

1. AEDO - Aeronautical engineering duty officer
2. AEF - Advanced electronics field
3. AFEES - Armed Forces Entrance and Examining Station
4. AFQT - Armed Forces Qualification Test
5. AFHPS - Armed Forces Health Professions Scholarship
6. AFVTG - Armed Forces Vocational Testing Group
7. AMA - American Medical Association
8. AOA - American Osteopathic Association
9. AOC - Air officer candidate
10. ASAP - As soon as possible
11. ASVAB - Armed Service Vocational Aptitude Battery
12. ATF - Advanced technical field
13. ATP - Apprentice training program
14. AVF - All-volunteer force
15. AVROC - Aviation reserve officer candidate
16. BAQ - Bachelor Allowance for Quarters
17. BTB - Basic test battery
18. BuPers - Bureau of Personnel
19. CNET - Commander, Navy Education and Training Command
20. COMNAVCRUITCOM - Commander, Navy Recruiting Command
21. DoD - Department of Defense
22. DPEP - Direct procurement enlistment program
23. DPPO - Direct procurement petty officer
24. EDO - Engineering duty officer
25. ENRO - Enlisted Navy recruiter orientation

26. FTS - Federal telephone system
27. GCT - General clerical/technical test
28. GED - General Educational Development Test
29. GSA - General Services Administration
30. HSG - High school graduate
31. JAG - Judge Advocate General
32. MREP - Medically remedial program
33. MSC - Medical Service Corps
34. NAOC-AI - Navy air officer candidate-air intelligence
35. NAVCRUITCOM - Navy Recruiting Command
36. NF - Nuclear field
37. NFOC - Navy flight officer candidate
38. NHSG - Nonhigh school graduate
39. NNRIC - Navy National Recruiting Information Center
40. NOIC - Navy Opportunity Information Center
41. NRA - Navy recruiting area
41. NRD - Navy recruiting district
42. NROTC - Navy Reserve Officer Training Corps
43. NRS - Navy recruiting station
44. NSE - Nonschool eligible
45. NUPOC - Nuclear power officer candidate
46. OCCSPEC - Occupational specialty program
47. OCS - Officer candidate school
48. OES - Odds for effectiveness score
49. PSI - Programmed school input
50. QMA - Qualified military available(s)

51. QUEBEC ("Q") - Male applicant at least 17 years of age without prior service.
52. RACS - Recruit allocation control system
53. RAD - Recruiting Aids Division
54. RAMS Board - Recruiting Aids Management Board
55. RDAC - Recruiting District Assistance Council
56. RFEP - Reserve female enlisted program
57. RINC (R-in-C) - Recruiter in command of a recruiting station
58. ROMO - Recruiting Officer Management Orientation
59. ROC - Reserve officer candidate
60. RTC - Recruit training command
61. SBTB - Short basic test battery
62. SE - School eligible
63. TAR - Training and administration of the Reserve
64. TEMAC - Temporary active duty recruiter
65. USAREC - U.S. Army Recruiting Command
66. USN - U.S. Navy (Regular Navy)
67. USNR - U.S. Naval Reserve
68. WAIS - Wechsler Adult Intelligence Scale
69. WATS - Wide area telephone service

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